Rocky Flats Closure Project

Proiect Baseline Devl WBS Filter 1EFB

Starts In FY

Baseline Cost and Basis of Estimate

WBS Filter TEFB
Activity Filter *

, l	<i>WBS No:</i> 1EFB0	1 Title: 130 Cluster Landlord											
F	Activity ID: 1EFE	Description: 130 Cluster Landlord Function	ns, FY00						Cost Risk	2 Schedule R	risk 1		
	Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
					Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
	1	Corrective maintenance	1.00	each	НС	5.998	5.998	129.539	35.411	0	164.950	63.215	228.165
	3	Preventive maintenance	1.00	each	HC	1.039	1.039	22.760	3.935	0	26.694	11.107	37.801
		Tot	al for Activit	y 1EFB0005	:		7.037	152.299	39.346	0	191.645	74.322	265.966

Line Item 1 - Corrective maintenance

1EFB01

1EFB0005

BOE

WBS No:

Activity ID:

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

Approximately 2079 corrective/routine maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$174.73 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 thru 03 are expected to be maintained at the same level as FY99. In FY04 it is expected that the maintenance requirements will drop due to PA closure and a requirement for less support personnel

Revised number of work orders - FY03-05 is 81.53% of FY99.

Basis for adjustment - Directed targets.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 30.77% (includes Linemen)

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

s	Cost Element		Skill	Department	Curve	Ouantity	Units
7:	50 STRAIGHT TIME BASE	C010	CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	393.03 F	lours
Faci	tors 784.82 h		0.3612 May 2000 Earned Value Fac	ctor			
_					1.38645 [SYS 061300	01 1.386448 - Tai	raet
7	50 STRAIGHT TIME BASE	C010	CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	275.81 H	lours
Faci	tors 550.76 h		0.3612 May 2000 Earned Value Fac	ctor			
			1.38645 [SYS 061300	01 1.386448 - Tai	raet		
7	50 STRAIGHT TIME BASE	C010	CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	265.25 H	lours
Faci	tors 529.66 h		0.3612 May 2000 Earned Value Fac	ctor			
					1.38645 [SYS 061300	01 1.386448 - Tai	raet
7	50 STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	640.94 F	lours
Faci	tors 1279.88 h		0.3612 May 2000 Earned Value Fac	ctor			
					1.38645 [SYS 061300	0] 1.386448 - Tai	rget

 WBS No:
 1EFB01

 Activity ID:
 1EFB0005

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filte

Baseline Devl 1EFB

	Baseline Cost and Basis	Activity Filter	* Starts In FY *
750 STRAIGHT TIME BASE	C020 ELECTRICIANS KE10H	Indust/Site Srvs Steelworkers	Linear 574.71 Hours
Factors 1147.61 h	0.3612 May 2000 Earned Value Factor		
			1.38645 [SYS 061300] 1.386448 - Target
750 STRAIGHT TIME BASE	C020 ELECTRICIANS KE10H	Indust/Site Srvs Steelworkers	Linear 548.89 Hours
Factors 1096.05 h	0.3612 May 2000 Earned Value Factor		
		T.	1.38645 [SYS 061300] 1.386448 - Target
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp KE10H	Indust/Site Srvs Steelworkers	Linear 44.21 Hours
Factors 88.28 h	0.3612 May 2000 Earned Value Factor		
		Т	1.38645 [SYS 061300] 1.386448 - Target
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp KE10H	Indust/Site Srvs Steelworkers	Linear 265.25 Hours
Factors 529.66 h	0.3612 May 2000 Earned Value Factor		
		T	1.38645 [SYS 061300] 1.386448 - Target
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp KE10H	Indust/Site Srvs Steelworkers	Linear 221.04 Hours
Factors 441.39 h	0.3612 May 2000 Earned Value Factor		
	T I	T	1.38645 ISYS 061300 1.386448 - Target
750 STRAIGHT TIME BASE		Indust/Site Srvs Steelworkers	Linear 265.25 Hours
Factors 529.66 h	0.3612 May 2000 Earned Value Factor		4 00045 IOVO 00400014 000440 T
750 OTDAIGUT TIME DAGE	COZO DAINITEDO IZEAGUA	Indust/Site Srvs Steelworkers	1.38645 [SYS 061300] 1.386448 - Target
750 STRAIGHT TIME BASE		lindust/Site Srvs Steelworkers	Linear 453.10 Hours
Factors 904.77 h	0.3612 May 2000 Earned Value Factor		4 00045 [OVO 004000] 4 000440 T
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS KE10H	Indust/Site Srvs Steelworkers	1.38645 [SYS 061300] 1.386448 - Target Linear 176.83 Hours
Factors 353.11 h	0.3612 May 2000 Earned Value Factor	IIIdust/Site Sivs Steetworkers	Lineal 170.03jHouis
ractors 353.11 II	0.3012 May 2000 Earned Value Factor		1.38645 [SYS 061300] 1.386448 - Target
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS KE10H	Indust/Site Srvs Steelworkers	Linear 143.64 Hours
Factors 286.83 h	0.3612 May 2000 Earned Value Factor	IIIdustroite orva oteetworkers	Linear 145.04 110013
1 401073 200.00 11	0.0012 May 2000 Earned Value 1 dotor		1.38645 [SYS 061300] 1.386448 - Target
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS KE10H	Indust/Site Srvs Steelworkers	Linear 913.76 Hours
Factors 1824.66 h	0.3612 May 2000 Earned Value Factor	Industria Sive Steeline Incident	Elitodi Tota Olitodic
102 1100 11	0.0012 may 2000 2amou talao talao.		1.38645 [SYS 061300] 1.386448 - Target
750 STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL WORKE KE10H	Indust/Site Srvs Steelworkers	Linear 390.50 Hours
<i>Factors</i> 779.77 h	0.3612 May 2000 Earned Value Factor		
			1.38645 [SYS 061300] 1.386448 - Target
750 STRAIGHT TIME BASE	R070 WASTE TREATMENT OPERATOR A KE10H	Indust/Site Srvs Steelworkers	Linear 132.62 Hours
Factors 264.83 h	0.3612 May 2000 Earned Value Factor		
			1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C010 CARPENTERS KE10H	Indust/Site Srvs Steelworkers	Linear 13.26 Hours
Factors 26.48 h	0.3612 May 2000 Earned Value Factor		
			1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.		Indust/Site Srvs Steelworkers	Linear 19.89 Hours
Factors 39.72 h	0.3612 May 2000 Earned Value Factor		
			1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.		Indust/Site Srvs Steelworkers	Linear 21.55 Hours
Factors 43.04 h	0.3612 May 2000 Earned Value Factor		
		T	1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.		Indust/Site Srvs Steelworkers	Linear 28.74 Hours
Factors 57.38 h	0.3612 May 2000 Earned Value Factor		
	Const El EGEDIGIANO	1. 1. 1/21: 2. 21. 1	1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.		Indust/Site Srvs Steelworkers	Linear 32.05 Hours
Factors 63.99 h	0.3612 May 2000 Earned Value Factor		4 2004E 10V0 00420014 200440 T
-			1.38645 [SYS 061300] 1.386448 - Target

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WBS No: Activity ID:

1EFB01 1EFB0005

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl 1EFB

	Activity Filter	*	Starts In FY *
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS KE10H Indust/Site Srvs Steelworkers	Linear	27.44 Hours
Factors 54.8 h	0.3612 May 2000 Earned Value Factor		
		1.38645 [SYS 061	3001 1.386448 - Target
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers	Linear	11.05 Hours
Factors 22.07 h	0.3612 May 2000 Earned Value Factor		
			3001 1.386448 - Target
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers	Linear	2.21 Hours
Factors 4.41 h	0.3612 May 2000 Earned Value Factor		
			3001 1.386448 - Target
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers	Linear	13.26 Hours
Factors 26.48 h	0.3612 May 2000 Earned Value Factor	4 000 45 10\/0 004	0001 4 000440 T
754 OVEDTIME DAGE & DDE	10070 DANTEDO		3001 1.386448 - Target
751 OVERTIME BASE & PRE.	C070 PAINTERS KE10H Indust/Site Srvs Steelworkers	Linear	22.66 Hours
Factors 45.24 h	0.3612 May 2000 Earned Value Factor	4 2004E IOVO 004	3001 1.386448 - Target
751 OVERTIME BASE & PRE.	C070 PAINTERS KE10H Indust/Site Srvs Steelworkers	Linear	13.26 Hours
Factors 26.48 h	0.3612 May 2000 Earned Value Factor	Lilledi	13.20ITIOUIS
20.40	U.3012 IWay 2000 Lamed Value Factor	1 386/5 [SVS 061	3001 1.386448 - Target
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers	Linear	45.69 Hours
Factors 91.23 h	0.3612 May 2000 Earned Value Factor	Lincal	+0.03ii l0di3
0.120	335.2	1.38645 [SYS 061	3001 1.386448 - Target
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers	Linear	7.18 Hours
Factors 14.34 h	0.3612 May 2000 Earned Value Factor		
		1.38645 [SYS 061	300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers	Linear	8.84 Hours
Factors 17.66 h	0.3612 May 2000 Earned Value Factor		
		1.38645 [SYS 061	300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C090 STRUCTURAL AND METAL WORKE KE10H Indust/Site Srvs Steelworkers	Linear	19.53 Hours
Factors 38.99 h	0.3612 May 2000 Earned Value Factor		
		1.38645 [SYS 061	300] 1.386448 - Target
751 OVERTIME BASE & PRE.	R070 WASTE TREATMENT OPERATOR A KE10H Indust/Site Srvs Steelworkers	Linear	6.63 Hours
Factors 13.24 h	0.3612 May 2000 Earned Value Factor		
			3001 1.386448 - Target
A5C SUPPLIES	0000 NONE C210S Facilities Momt & Maintenance	Linear	35.411.40 Dollars
<i>Factors</i> 69666.8 d	1.015 FY00 Escalation 0.3612 May 2000 Earned Value Factor		
		1.38645 [SYS 061	3001 1.386448 - Target

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 817 preventative maintenance work actions are expected.

remaining days due to change in Kaiser Hill contract with DOE.

Data Source - MMS and P&I Reporting System SVAR for FY98 Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$72.29 average

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The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Baseline Devl Proiect WBS Filter Activity Filter

1EFB

Unit Adjustment factor - FY99 is used as a base year. FY00 thru 03 are expected to be maintained at the same level as FY99. In FY04 it is expected that the maintenance requirements will drop due to PA closure and a requirement for less support personnel Revised number of work orders - FY03-05 is 81.53% of FY99.

Department

Basis for adjustment - Directed targets.

The percentage of maintenance effort (labor Type) required is as follows:

50.00% (includes Linemen)

Cost Element

Maint. Mech 37 50% Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Skill

Resources

,	Cost Etement		<u> </u>	Debarment	Curve	Outility Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	530.50 Hours
Factors	1059.33 h		0.3612 May 2000 Earned Value Fac	ctor		
					1.38645 [SYS 06130	01 1.386448 - Target
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear	397.87 Hours
Factors	794.5 h		0.3612 May 2000 Earned Value Fac	ctor		
					1.38645 [SYS 06130	01 1.386448 - Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	60.71 Hours
Factors	121.22 h		0.3612 May 2000 Earned Value Fac	ctor		
					1.38645 [SYS 06130	01 1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	26.53 Hours
Factors	52.97 h		0.3612 May 2000 Earned Value Fac	ctor		
	T		T		1.38645 [SYS 06130	01 1.386448 - Target
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear	19.89 Hours
Factors	39.72 h		0.3612 May 2000 Earned Value Fac	ctor		
	T		T		1.38645 [SYS 06130	01 1.386448 - Target
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	3.03 Hours
Factors	6.06 h		0.3612 May 2000 Earned Value Fac	ctor		
					1.38645 [SYS 06130	01 1.386448 - Target
A5C	SUPPLIES	0000	NONE	C210S Facilities Momt & Maintenance	Linear	3.934.60 Dollars
	7740 75 -1		4 045 EV00 E 1 1	0.0040 Mary 0000 Farrand Maly a Factor		

7740.75 d 1.015 -- FY00 Escalation --0.3612 May 2000 Earned Value Factor Factors

1.38645 [SYS 061300] 1.386448 - Target

Starts In FY

Ouantity

Curve

Units

Activity ID: 1EFB0010 Description: 130 Cluster Landlord Functions, FY01

2 Schedule Risk Cost Risk Total Prime Line Item Description **Ouantity** Units BOELabor Labor Hours Labor Cost Materials/ Sub Contingency Burden Cost Total Cost TypeHours/Unit Total **Total** Cost & Escalation Cost 1.00 each HC 10,936 10,936 62,887 298,518 112,396 410.913 Corrective maintenance 235,631 0 HC 1,844 1,844 40,419 6,987 0 47,406 19,280 Preventive maintenance 1.00 each 66,686 SYS Contingency And Escalation 1.00 ea EE 0 0 0 25,265 25,265 0 25,265 Total for Activity 1EFB0010: 12.781 276.050 69.874 25.265 371.189 131.676 502.865

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

Approximately 2079 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

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Activity ID: 1EFB0010 Baseline Cost and Basis of Estimate

Proiect Baseline Devl WBS Filter 1EFB Activity Filter *

Starts In FY *

Units - Work Packages

Unit Cost - \$174.73 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 thru 03 are expected to be maintained at the same level as FY99. In FY04 it is expected that the maintenance requirements will drop due to PA closure and a requirement for less support personnel

Revised number of work orders - FY03-05 is 81.53% of FY99.

Basis for adjustment - Directed targets.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 30.77% (includes Linemen)

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es	Cost Element		Skill	Department	Curve	Ouantity Units
750	STRAIGHT TIME BASE	C010 CARPENTER	RS KE10	OH Indust/Site Srvs Steelworkers	Linear	706.58 Hours
Factors	794.5 h					
	075 44047 7445 5405	0040 040054755				001 .88934200 - Svstem
750	STRAIGHT TIME BASE	C010 CARPENTER	RS KE10	OH Indust/Site Srvs Steelworkers	Linear	471.05 Hours
Factors	529.66 h				0.00004 [0.000.0	201 0000 4000
750	STRAIGHT TIME BASE	C010 CARPENTER	NE KEA	OH Indust/Site Srvs Steelworkers	0.88934 ISYS 06140	001 .88934200 - Svstem 765.48 Hours
Factors		I COTO ICARPENTER	(S	DH IIIIdusi/Site Sivs Steelworkers	Lineal	/05.46Inouis
raciors	800.73 11				0.88034 [676.0614]	001 .88934200 - Svstem
750	STRAIGHT TIME BASE	C020 ELECTRICIA	NS KE1	OH Indust/Site Srvs Steelworkers	U.00934 1313 00140	1.020.62 Hours
Factors		T COZO IELECTRICIA	NO TREIN	JIT IIII GUSI/OILE SIVS SLEEIWOIKEIS	Lineal	1.020.021110013
ruciors	1147.01 11				0.88934 [SVS.06140	001 .88934200 - Svstem
750	STRAIGHT TIME BASE	C020 ELECTRICIA	NS KF10	OH Indust/Site Srvs Steelworkers	Linear	974.76 Hours
Factors		TOOLO TELEGITATORY		TITING CONTROLL		07 1.7 011 10410
1 401015					0.88934 [SYS 06140	001 .88934200 - Svstem
750	STRAIGHT TIME BASE	C020 ELECTRICIA	NS KE10	OH Indust/Site Srvs Steelworkers	Linear	1.138.25 Hours
Factors	1279.88 h					
					0.88934 [SYS 06140	001 .88934200 - Svstem
750	STRAIGHT TIME BASE	C040 MAINTENAN	CE MACHINIST (incl Exp KE10	OH Indust/Site Srvs Steelworkers	Linear	78.51 Hours
Factors	88.28 h					
					0.88934 [SYS 06140	001 .88934200 - Svstem
750	STRAIGHT TIME BASE	C040 MAINTENAN	CE MACHINIST (incl Exp KE10	OH Indust/Site Srvs Steelworkers	Linear	471.05 Hours
Factors	529.66 h					
	1				0.88934 [SYS 06140	001 .88934200 - Svstem
750	STRAIGHT TIME BASE	C040 MAINTENAN	CE MACHINIST (incl Exp KE10	OH Indust/Site Srvs Steelworkers	Linear	392.55 Hours
Factors	441.39 h					
						001 .88934200 - Svstem
750	STRAIGHT TIME BASE	C070 PAINTERS	KE10	OH Indust/Site Srvs Steelworkers	Linear	804.65 Hours
Factors	904.77 h					
	T		T	1		001 .88934200 - Svstem
750	STRAIGHT TIME BASE	C070 PAINTERS	KE10	OH Indust/Site Srvs Steelworkers	Linear	471.05 Hours
Factors	529.66 h				0.0004	
	OTD 4 10 1 T T 1 1 T D 1 T T		AND DIDEFITTEDS			001 .88934200 - Svstem
750	STRAIGHT TIME BASE	C080 PLUMBERS	AND PIPEFITTERS KE10	OH Indust/Site Srvs Steelworkers	Linear	255.09 Hours
Factors	286.83 h				0.00004 10000 0000	201 0000 4000 0 :
•	.	 	·	·	0.88934 ISYS 06140	001 .88934200 - Svstem

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 WBS No:
 1EFB01

 Activity ID:
 1EFB0010

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter

Baseline Devl 1EFB

121 20010	Baseline Cost	and Basis of Estimate	v Filter *	Starts In FY *
750 STRAIGHT TIME BASE Factors 1824.66 h	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	1.622.75 Hours
				001 .88934200 - Svstem
750 STRAIGHT TIME BASE Factors 353.11 h	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	314.04 Hours
750 OTDAIOUT TIME DAGE	C090 STRUCTURAL AND METAL WORK	E KEAOL In the st/Oite On to Ote about the se	0.88934 ISYS 0614 Linear	001 .88934200 - System 693.48 Hours
750 STRAIGHT TIME BASE Factors 779.77 h	1 C090 ISTRUCTURAL AND METAL WORK	E KE10H lindust/Site Srvs Steelworkers		
750 STRAIGHT TIME BASE	R070 WASTE TREATMENT OPERATOR	A KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 0614 Linear	001 .88934200 - Svstem 235.52 Hours
Factors 264.83 h			0.88834 [575.0614	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	U.80334 1313 0014	
Factors 43.04 h				001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	U.88934 1313 0614	35.32 Hours
Factors 39.72 h				
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 ISYS 0614 Linear	001 .88934200 - Svstem 23.55 Hours
Factors 26.48 h	TOTO IOAN ENTERO	TRETOTT IIIMUS/OILE STVS SIGEIWOIREIS		
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	0.88934 ISYS 0614 Linear	001 .88934200 - Svstem 56.91 Hours
Factors 63.99 h	JOSES ELECTRICITATE	TRETOTT IIII GOSTOLO OTVO OLOGIWOTICIO		
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	0.88934 ISYS 0614 Linear	00] .88934200 - System 48.74 Hours
Factors 54.8 h	1 GUZO IELEGINIGIANO	INCTOTT IIIIUUSVOILE SIVS SIEELWOIKEIS		
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	0.88934 S13 0614	00] .88934200 - System 51.03 Hours
Factors 57.38 h				00] .88934200 - System
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Ex	KE10H Indust/Site Srvs Steelworkers	0.88934 1313 0014 Linear	19.63 Hours
Factors 22.07 h				
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Ex	KE10H Indust/Site Srys Steelworkers	0.88934 1313 0614 Linear	001 .88934200 - Svstem 23.55 Hours
Factors 26.48 h				
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Ex	vn KE10H Indust/Site Srys Steelworkers	0.88934 ISYS 0614 Linear	001 .88934200 - Svstem 3.92 Hours
Factors 4.41 h	TOTO IIVIAINI EIVANOE IVIAOI IINIST (IIIG EZ	AD TAL TOT IIIMUS/OILE SIVS SIGEIWOINGS		
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 ISYS 0614 Linear	001 .88934200 - Svstem 40.23 Hours
Factors 45.24 h	T COTO II MINI LINO	TETOT IIIMGVOIC ON OCCUMENCIO		
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 ISYS 0614 Linear	001 .88934200 - Svstem 23.55 Hours
Factors 26.48 h			0.88934 ISYS 0614	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	81.13 Hours
Factors 91.23 h			0.88034 [676.0814	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 1515 0614 Linear	12.75 Hours
Factors 14.34 h			0.88934 [SYS 0614	00] .88934200 - System

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Rocky Flats Closure Project Resoling Cost and Resis of Estimate

Proiect WBS Filter

Baseline Devl 1EFB

0.88934 [SYS 061400] .88934200 - System

			Daseille Oost al	iu Dasis	Acti	ivity Filter	*	Starts In FY *
751 OVE	ERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers		Linear	15.71 Hours
Factors 1	17.66 h							
			<u></u>				0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVE	ERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers		Linear	34.68 Hours
Factors 3	38.99 h							
						·	0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVE	ERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers		Linear	11.77 Hours
Factors 1	13.24 h							
						·	0.88934 [SYS 06140	01 .88934200 - Svstem
A5C SUF	PPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance		Linear	62.886.96 Dollars
Factors 6	69666.8 d		1.015 FY00 Escalation					

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned

maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 817 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$72.29 average

Unit Adjustment factor - FY99 is used as a base year. FY00 thru 03 are expected to be maintained at the same level as FY99. In FY04 it is expected that the maintenance requirements will drop due to PA closure and a requirement for less support personnel

Revised number of work orders - FY03-05 is 81.53% of FY99.

Basis for adjustment - Directed targets.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50% Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

s	Cost Element		Skill		Department	Curve	Ouantity	Units
750	750 STRAIGHT TIME BASE C020 ELECTRICIANS		KE10H	Indust/Site Srvs Steelworkers	Linear	942.11	Hours	
Factors	1059.33 h							
						0.88934 [SYS 061400	01 .88934200 - \$	System
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	706.58	Hours
Factors	794.5 h							
						0.88934 [SYS 061400	01 .88934200 - \$	System
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	107.81	Hours
Factors	121.22 h							
						0.88934 [SYS 061400	01 .88934200 - \$	System
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	47.11	Hours
Factors	52.97 h							
						0.88934 [SYS 061400	0] .88934200 - \$	System

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WBS No: 1EFB01 **Rocky Flats Closure Project** Activity ID: 1EFB0010 **Baseline Cost and Basis of Estimate**

Proiect WBS Filter Baseline Devl 1EFB

					Activity Filter	*	Starts In FY	*
751	OVERTIME BASE & PRE.	C040 MAINTE	ENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linea	ar 35.32	Hours
Factors	39.72 h		·				·	Ÿ
						0.88934	SYS 0614001 .88934200 - 9	System

KE10H Indust/Site Srvs Steelworkers

OVERTIME BASE & PRE. 6.06 Factors

0.88934 [SYS 061400] .88934200 - System A5C SUPPLIES 0000 NONE C210S Facilities Mgmt & Maintenance Linear 6.987.44 Dollars

Factors 7740.75 d 1.015 -- FY00 Escalation --

C080 PLUMBERS AND PIPEFITTERS

0.88934 [SYS 061400] .88934200 - System

Line Item SYS - Contingency And Escalation

BOE

Resources

es		Cost Element		Skill		Department	Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	15.222.25	Dollars
	Factors	15222.3 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	10.042.85	Dollars

10042.9 Dollars

Description: 130 Cluster Landlord Functions EY02

Cost Risk 2 Schedule Risk

TOUTHUR ID. ILI	Description 100 Gladioi Landioi a l'unidio	Z Solicente History										
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
1	Corrective maintenance			HC	10.936	10.936	235.631	62.887	0	298.518	83.178	381.695
3	Preventive maintenance	1.00	each	HC	1.844	1.844	40,419	6.987	0	47,406	14.268	61.674
SYS	/S Contingency And Escalation				0	0	0	0	66.097	66.097	0	66.097
Total for Activity 1EFB0015:							276.050	69.874	66.097	412.021	97.445	509.466

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

Approximately 2079 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$174.73 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 thru 03 are expected to be maintained at the same level as FY99. In FY04 it is expected that the maintenance requirements will drop due to PA closure and a requirement for less support personnel

Revised number of work orders - FY03-05 is 81.53% of FY99.

Basis for adjustment - Directed targets.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 30.77% (includes Linemen)

Maint. Mech 13.85% 10 77% Painter 23.08% Pipefitter Metal Worker 4.62%

Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Units Resources Cost Element Skill Curve **Quantity** Department

 WBS No:
 1EFB01

 Activity ID:
 1EFB0015

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filte

Baseline Devl 1EFB

	Baseline Co	St and Basis of Estimate Activity Fil	ter * Starts In FY *
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 765.48 Hours
Factors 860.73 h			
			0.88934 ISYS 0614001 .88934200 - System
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 706.58 Hours
Factors 794.5 h			0.00004 [0)/0.0044003 00004000 0
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400] .88934200 - Svstem Linear 471.05 Hours
Factors 529.66 h	I COTO ICARPENTERS	RETUR lindust/Site Srvs Steelworkers	Linear 4/1.05iHours
<i>Factors</i> 329.00 II			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 1.138.25 Hours
Factors 1279.88 h	. SOLO ILLESTITUDINO	THE FOIL HIM WAY DISCUSS OF THE STATE OF THE	
			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 1.020.62 Hours
Factors 1147.61 h			
			0.88934 [SYS 061400] .88934200 - Svstem
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 974.76 Hours
<i>Factors</i> 1096.05 h			0.00004 [0)/0.0044001 00004000 0
ZEO OTDAIGUT TIME DAGE	COAO MANITENIANICE MACHINICE (:-	CLEXD KE10H Indust/Site Srvs Steelworkers	0.88934
750 STRAIGHT TIME BASE Factors 441.39 h	1 C040 IMAINTENANCE MACHINIST (Inc	CLEXD RETURN Indust/Site Sivs Steelworkers	Linear 392.55lHours
<i>Paciors</i> 441.39 II			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (inc	CI Exp KE10H Indust/Site Srvs Steelworkers	Linear 78.51 Hours
Factors 88.28 h	, co.o , , , , , , , , , , , , , , , , , ,	. Exp NETOT Industration of the closure incident	266.
			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (inc	cl Exp KE10H Indust/Site Srvs Steelworkers	Linear 471.05 Hours
Factors 529.66 h			
			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear 804.65 Hours
Factors 904.77 h			
	L COTO DANITEDO	1/5/01/1/1/20/ 0 0/ / /	0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear 471.05 Hours
<i>Factors</i> 529.66 h			motors 2 0001000 [001100 2V2] 10000 0
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400] .88934200 - Svstem Linear 255.09 Hours
Factors 286.83 h	T COOC II EDIVIDENS AND I II ETTITENS	TAL TOTA III III III III III III III III III I	Lilleal 255.05ii louis
140005 200.00 11			0.88934
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear 314.04 Hours
Factors 353.11 h			
			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear 1.622.75 Hours
Factors 1824.66 h			
	0000 070007000 0000	NEW 1/5/2011 1 1/2012 2 20 1 1	0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	I C090 ISTRUCTURAL AND METAL WC	ORKE KE10H Indust/Site Srvs Steelworkers	Linear 693.48 Hours
<i>Factors</i> 779.77 h			0.00034 [CVC.064400] 00034300 C
750 STRAIGHT TIME BASE	ROZO WASTE TREATMENT OREDATA	OR A KE10H Indust/Site Srvs Steelworkers	0.88934
Factors 264.83 h	I NOTO INVASTE TREATMENT OPERATO	ON A I NE TOTT IIII QUANCILE SIVS STEETWORKETS	Lineai Zoo.oZinouis
207.00 11			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 38.28 Hours
Factors 43.04 h	V 18/11 11 11/18/11		50.60110010
			0.88934 [SYS 061400] .88934200 - System
	·		

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WBS No: 1EFB01 Activity ID:

1EFB0015

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl 1EFB

IEFB0013	Baseline Cost ar	nd Basis of Estimate	ier ierb Filter *	Starts In FY *
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	35.32 Hours
Factors 39.72 h			0.00004 [67/6 0644/	101 00024200 Custom
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	U.88934 1515 06140	01 .88934200 - Svstem 23.55 Hours
Factors 26.48 h				
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 06140 Linear	01 .88934200 - Svsten 56.91 Hours
Factors 63.99 h	1 CO20 IELECTRICIANS	RETURN IIII IIII III III III III III III III	Lilleai	30.91Inouis
			0.88934 [SYS 06140	
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	48.74 Hours
factors 54.8 h			0.88934 [SYS 06140	101 88934200 - Sveter
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	51.03 Hours
Factors 57.38 h				
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp.	KE10H Indust/Cita Strip Stochworkers	0.88934 [SYS 06140 Linear	01 .88934200 - Svster 19.63 Hours
Factors 22.07 h	1 C040 IMAINTENANCE MACHINIST (INC. EXD.	RETURN IIII IIII IIII III III III III III II	Linear	19.03100018
			0.88934 ISYS 06140	
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear	23.55 Hours
actors 26.48 h			0.88934 [SYS 06140	101 88034300 Syston
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	U.88934 1313 00140	3.92 Hour
Factors 4.41 h				
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srys Steelworkers	0.88934 [SYS 06140 Linear	0] .88934200 - Syster 40.23 Hours
751 OVERTIME BASE & PRE. Factors 45.24 h	C0/0 PAINTERS	KETOH IIIIdusi/Site SIVS Steelworkers	Linear	40.23 Flouis
			0.88934 [SYS 06140	
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	23.55 Hours
Factors 26.48 h			0.88934 [SYS 06140	101 88934200 - Sveter
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	81.13 Hours
Factors 91.23 h				
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 06140 Linear	01 .88934200 - Svster 12.75 Hours
Factors 14.34 h	1 C080 IPLUIVIBERS AND PIPEFITTERS	RETURN IIII IIII IIII III III III III III II	Linear	12./SITIOUIS
			0.88934 [SYS 06140	
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	15.71 Hours
Factors 17.66 h			0.88934 [SYS 06140	101 88034300 Svetor
751 OVERTIME BASE & PRE.	C090 STRUCTURAL AND METAL WORKE	KE10H Indust/Site Srvs Steelworkers	U.38934 1313 00140	34.68 Hours
Factors 38.99 h				
754 OVEDTIME DAGE & DEE	R070 WASTE TREATMENT OPERATOR A	KE4011 Indust/Oits On a Ots should	0.88934 [SYS 06140	
751 OVERTIME BASE & PRE. Factors 13.24 h	I KU/U IWASTE TREATMENT OPERATOR A	KETUH IINQUST/SITE STVS STEELWORKERS	Linear	11.77 Hour
10.21			0.88934 [SYS 06140	01 .88934200 - Svste
A5C SUPPLIES	0000 NONE	C210S Facilities Momt & Maintenance	Linear	62.886.96 Dolla
<i>Factors</i> 69666.8 d	1.015 FY00 Escalation		0.00004 [0.70.00440	101 00004000 Ct
			0.88934 [SYS 06140	iui .08934200 - Syster

Line Item 3 - Preventive maintenance

BOE

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Activity Filter

Baseline Devl 1EFB

ilter * Starts In FY

Curve

Linear

Ouantity

0.88934 [SYS 061400] .88934200 - System

Units

942.11 Hours

in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

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Data Source - MMS and P&I Reporting System SVAR for FY98

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Item - Preventive maintenance

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Unit Cost - \$72.29 average

Unit Adjustment factor - FY99 is used as a base year. FY00 thru 03 are expected to be maintained at the same level as FY99. In FY04 it is expected that the maintenance requirements will drop due to PA closure and a requirement for less support personnel

KE10H Indust/Site Srvs Steelworkers

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The percentage of maintenance effort (labor Type) required is as follows:

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Cost Element

Maint. Mech 37.50%

Pipefitter 12.50%

750 STRAIGHT TIME BASE

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

C020 ELECTRICIANS

400 Oliveter I are disert Five effects FV00

Resources

Factors 1059.33 h						
				-	0.88934 [SYS 06140	01 .88934200 - Svstem
750 STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	706.58 Hours
Factors 794.5 h						
					0.88934 ISYS 06140	01 .88934200 - Svstem
750 STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	107.81 Hours
Factors 121.22 h						
					0.88934 ISYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	47.11 Hours
Factors 52.97 h						
					0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	35.32 Hours
Factors 39.72 h						
					0.88934 [SYS 06140	01 .88934200 - System
751 OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.39 Hours
Factors 6.06 h						
					0.88934 [SYS 06140	01 .88934200 - System
A5C SUPPLIES	0000	NONE	C210S	Facilities Momt & Maintenance	Linear	6.987.44 Dollars
Factors 7740.75 d		1.015 FY00 Escalation				

Line Item SYS - Contingency And Escalation

BOE

Resources

es	Cost Element Skill			Department	Curve	Ouantity	Units		
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	45.377.48	Dollars
نے.	Factors	45377.5 Dollars							
L	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	20.719.29	Dollars

Factors 20719.3 Dollars

Activity ID: 1EFB0020 Description: 130 Cluster Landlord Functions									Cost Risk	2 Schedule R	ask 1		
	Line Item	Description	Quantity	Units	BOE Type	** **	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect

Baseline Devl

seline Cost and Basis of Estimate	WBS Filter	1EFB
seille Cost and Dasis of Estillate	Activity Filter	*

			Activity Filter *							Starts In FY *			
1	Corrective maintenance	1.00	each I	HC	10.936	10.936	235.631	62.887	0	298.518	81.528	380.046	
3	Preventive maintenance	1.00	each I	HC	1.844	1.844	40.419	6.987	0	47.406	13.985	61.391	
SYS	Contingency And Escalation	1.00	ea l	EE	0	0	0	0	122.081	122.081	0	122.081	
		Total for Activity 1EFB0020:				12.781	276.050	69.874	122.081	468.005	95.513	563.518	

Line Item 1 - Corrective maintenance

BOE

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Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

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Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Ouantity Units
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	706.58 Hours
Factors 794.5 h			0.88934 [SYS 061	4001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	765.48 Hours
Factors 860.73 h			0.88934 [SYS 061	4001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	471.05 Hours
Factors 529.66 h			0.88934 [SYS 061	4001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	1.020.62 Hours
Factors 1147.61 h			0.88934 [SYS 061	4001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	974.76 Hours
Factors 1096.05 h			0.88934 [SYS 061	4001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	1.138.25 Hours
Factors 1279.88 h			0.88934 [SYS 061	4001 .88934200 - Svstem

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Ba
WBS Filter 1E
Activity Filter *

Baseline Devl 1EFB

1EFB0020	Baseline Cost ar	nd Basis of Estimate	WBS Filter 1EFB Activity Filter *	Starts In FY *
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelwork		
Factors 88.28 h				
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Says Steelwork		YS 0614001 .88934200 - Svstem 392.55lHours
Factors 441.39 h	1 CO40 IMAINTENANCE MACHINIST THE EXD	I KE TOTT IIII dust/Site SIVs Steetwork	EIS LINEAL	392.331110013
			0.88934 [S	YS 0614001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelwork	ers Linear	471.05 Hours
Factors 529.66 h			0.00004 10	VO 004 4001 0000 4000 O
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelwork		YS 0614001 .88934200 - Svstem 804.65 Hours
Factors 904.77 h	1 OOTO II MINTERO	TILL TOTAL IIII GGGV ONC OTVS OCCIWOTIO	i Eilleal	007.001110013
				YS 0614001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelwork	ers Linear	471.05 Hours
Factors 529.66 h			21 1,0000	YS 0614001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwork		
Factors 353.11 h				
		T T		YS 0614001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwork	ers Linear	1.622.75 Hours
Factors 1824.66 h			21 150080	YS 0614001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwork	ers Linear	
Factors 286.83 h				
				YS 061400] .88934200 - System
750 STRAIGHT TIME BASE Factors 779.77 h	C090 STRUCTURAL AND METAL WORKE	KE10H Indust/Site Srvs Steelwork	ers Linear	693.48 Hours
Factors 779.77 h			0.88934 [S	YS 061400] .88934200 - System
750 STRAIGHT TIME BASE	R070 WASTE TREATMENT OPERATOR A	KE10H Indust/Site Srvs Steelwork		
Factors 264.83 h				
TEAL OVERTIME DAGE & DDE	OCALO CARRENTERO	1/5/011 1 1/0" 0 0 1 1		YS 061400] .88934200 - System
751 OVERTIME BASE & PRE. Factors 43.04 h	C010 CARPENTERS	KE10H Indust/Site Srvs Steelwork	ers Linear	38.28 Hours
10.04			0.88934 [S	YS 0614001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelwork		
Factors 39.72 h				
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelwork		YS 0614001 .88934200 - System 23.55 Hours
Factors 26.48 h	1 COTO ICARPENTERS	RETURN IIII III III III III III III III III	ers Lillean	Z3.33IHOUIS
			0.88934 [S	YS 0614001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwork	ers Linear	56.91 Hours
Factors 63.99 h			0.00004 10	VO 004 4001 0000 4000 O
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwork		YS 0614001 .88934200 - Svstem 48.74 Hours
Factors 54.8 h	1 0020 IEEECTRICIANO	TIL TOTT IIII GGS/ONE OTVS SteetWOTK	Linear	40.7 411 10013
				YS 0614001 .88934200 - Svsten
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwork	ers Linear	51.03 Hours
Factors 57.38 h			0.00004 100	VC 064 4001 0000 4000
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Stys Steelwork		YS 0614001 .88934200 - Svstem 19.63 Hours
Factors 22.07 h	1 CO TO THE MINISTER WAS INVIOLITING THE	TILE 1911 IIII III III III III III III III I	Linear	13.001110013
			0.88934 [S	YS 061400] .88934200 - System

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl 1EFB

	Baseline Cost and Basis of Estimate Activi	ty Filter * Starts In FY *
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers	Linear 23.55 Hours
Factors 26.48 h		
		0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers	Linear 3.92 Hours
Factors 4.41 h		
		0.88934 [SYS 0614001.88934200 - System
751 OVERTIME BASE & PRE.	C070 PAINTERS KE10H Indust/Site Srvs Steelworkers	Linear 40.23lHours
Factors 45.24 h		
		0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C070 PAINTERS KE10H Indust/Site Srvs Steelworkers	Linear 23.55lHours
Factors 26.48 h		
		0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers	Linear 81.13lHours
Factors 91.23 h		
		0.88934
751 OVERTIME BASE & PRE.	C080 IPLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers	Linear 12.75lHours
Factors 14.34 h		
	Occor DIVINDEDO AND DIDEFITTEDO	0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers	Linear 15.71 Hours
Factors 17.66 h		0.00004 [0]/0.0044001 00004000 0
754 OVEDTIME DAGE & DDE	COOR CERUCIUM AND METAL WORKE KEACLU Latint/Cita Cons Charles	0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C090 STRUCTURAL AND METAL WORKE KE10H Indust/Site Srvs Steelworkers	Linear 34.68 Hours
Factors 38.99 h		0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	R070 WASTE TREATMENT OPERATOR A KE10H Indust/Site Srvs Steelworkers	
751 OVERTIME BASE & PRE. Factors 13.24 h	NOTO IMAGIE REALIMENT OPERATOR A NETUR IIIQUSVOILE SIVS STEELWORKETS	Linear 11.77 Hours
raciors 13.24 II		0.88934 [SYS 061400] .88934200 - System
A5C SUPPLIES	0000 NONE C210S Facilities Mgmt & Maintenance	Linear 62.886.96 Dollars
Factors 69666.8 d	1.015 FY00 Escalation	Linear 02,000.30 D0 ars
1 actors 00000.0 u	1.010 Localdilott	

Line Item 3 - Preventive maintenance

0.88934 [SYS 061400] .88934200 - System

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

Approximately 817 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$72.29 average

Unit Adjustment factor - FY99 is used as a base year. FY00 thru 03 are expected to be maintained at the same level as FY99. In FY04 it is expected that the maintenance requirements will drop due to PA closure and a requirement for less support personnel

Revised number of work orders - FY03-05 is 81.53% of FY99.

Basis for adjustment - Directed targets.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50%

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Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl 1EFB

Activity Filter Starts In FY Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es		Cost Element	Element Skill			Department	Curve	Quantity	Units
	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	942.11	Hours
	Factors	1059.33 h							

						0.88934 [S	SYS 0614001 .88934200) - Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	706	58 Hours

Factors 794.5 h

						0.88934 ISYS 06140	01.88934200 - Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	107.81 Hours

121.22 h Factors

						0.88934 ISYS 061400	01.88934200 - Svstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	47.11 Hours
•	•		•		•		

52.97 Factors h

						0.88934 ISYS 061400	01.88934200 - Svstem
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	35.32 Hours

Factors 39.72 h

751 OVERTIME BASE & PRE. C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers Linear 5.39 Hours							0.88934 ISYS 06140	01.88934200 - Svstem
	751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.39 Hours

Factors 6.06

0.88934 [SYS 061400] .88934200 - System A5C SUPPLIES 0000 NONE C210S Facilities Mgmt & Maintenance 6.987.44 Dollars

Factors 7740.75 d 1.015 -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - System

Line Item SYS - Contingency And Escalation

BOE

Resources

es		Cost Element		Skill		Department	Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	88.229.02	Dollars
	Factors	88229.0 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	33.851.72	Dollars

33851.7 Dollars Factors

Activity ID: 1EFB0025 Description: 130 Cluster Landlord Functions. FY04 Cost Risk 2 Schedule Risk

Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		1
1	Corrective maintenance	1.00	each	НС	8.575	8.575	184.724	49.802	0	234.526	52.092	286.619
3	Preventive maintenance	1.00	each	HC	1.475	1.475	32.344	5.508	0	37.852	9.121	46.973
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	47.542	47.542	0	47.542
	Tot	10.051	217.068	55.310	47.542	319.920	61.213	381.133				

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

Approximately 2079 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

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WBS No: 1EFB01 1EFB0025 Activity ID:

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Activity Filter

Baseline Devl 1EFB

Starts In FY *

Unit Cost - \$174.73 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 thru 03 are expected to be maintained at the same level as FY99. In FY04 it is expected that the maintenance requirements will drop due to PA closure and a requirement for less support personnel Revised number of work orders - FY03-05 is 81.53% of FY99.

Basis for adjustment - Directed targets.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 30.77% (includes Linemen)

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resource

This estimate includes a proje	ct productivity/efficiency factor i	for committed but as yet undefined cost reduc	ctions.	
S Cost Element	Skill	Department	Curve	Ouantity Units
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	564.73 Hours
Factors 635 h				
750 OTDAIOUT TIME DAGE	OO40 OARDENTERO	VE4011 1. 1. 1/0': 0. 0: 1. 1		400] .88934200 - System
750 STRAIGHT TIME BASE Factors 688 h	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	611.87 Hours
Factors 688 h			0.88934 [575.061	4001 .88934200 - System
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	377.08 Hours
Factors 424 h				
			0.88934 [SYS 061	4001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	88.93 Hours
Factors 100 h				
				4001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	779.95 Hours
Factors 877 h			0.00004 10000.004	4001 00004000 0 4
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srys Steelworkers	0.88934 ISYS 061 Linear	4001 .88934200 - Svstem 1.467.41 Hours
Factors 1650 h	I CO20 IELECTRICIANS	RETURN IIII dust/Site Sivs Steelworkers	Lilleal	1.407.411HUUIS
1 4000 11			0.88934 [SYS 061	4001 .88934200 - System
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST	(incl Exp KE10H Indust/Site Srvs Steelworkers	Linear	62.25 Hours
Factors 70 h				
			0.88934 [SYS 061	4001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST	(incl Exp KE10H Indust/Site Srvs Steelworkers	Linear	313.94 Hours
Factors 353 h				
				4001 .88934200 - System
750 STRAIGHT TIME BASE Factors 424 h	I C040 IMAINTENANCE MACHINIST	(incl Exp KE10H Indust/Site Srvs Steelworkers	Linear	377.08 Hours
Factors 424 h			0.88034 [SVS.061	400] .88934200 - System
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	643.88 Hours
Factors 724 h	1 00.0 1.7			0.101001.104.0
			0.88934 [SYS 061	400] .88934200 - System
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	377.08 Hours
Factors 424 h				
				400] .88934200 - System
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTE	RS KE10H Indust/Site Srvs Steelworkers	Linear	250.79 Hours
Factors 282 h				
	· · · · · · · · · · · · · · · · · · ·		0.88934 ISYS 061	4001 .88934200 - Svstem

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Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Ba
WBS Filter 1E
Activity Filter *

Baseline Devl 1EFB

1EFB0025	Baseline Cost a	nd Basis of Estimate	WBS Filter 1EFB	Starts In FY *
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworke	Activity Filter	1.298.44 Hours
Factors 1460 h				
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworke		0614001 .88934200 - Svstem 204.55 Hours
Factors 230 h	1 COOO IFLOWIDENS AND FIFEITITENS	TRE TOTT THIRDS//Site SIVS Steelworke	EIS LIIIEAI	204.331110018
				0614001 .88934200 - Svstem
750 STRAIGHT TIME BASE Factors 624 h	C090 STRUCTURAL AND METAL WORKE	KE10H Indust/Site Srvs Steelworke	ers Linear	554.95lHours
raciors 024 II			0.88934 [SYS]	0614001 .88934200 - Svstem
750 STRAIGHT TIME BASE	R070 WASTE TREATMENT OPERATOR A	KE10H Indust/Site Srvs Steelworke		188.54 Hours
Factors 212 h			0.88934 [575]	0614001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworke		30.24 Hours
Factors 34 h				
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworke		0614001 .88934200 - Svstem 28.46lHours
Factors 32 h	1 COTO TOAKI ENTERS	TRE TOTA IIII III III III III III III III III	EI3 LIIIEAI	20.401110013
		T		0614001 .88934200 - Svstem
751 OVERTIME BASE & PRE. Factors 20 h	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworke	ers Linear	17.79 Hours
raciois 20 II			0.88934 [SYS (0614001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworke	ers Linear	45.36 Hours
Factors 51 h			2V21 NEG88 U	061400] .88934200 - System
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworke		41.80 Hours
Factors 47 h				
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworke		061400] .88934200 - System 40.55 Hours
Factors 45.6 h	1 0020 ILLEGINIOIANS	TRE TOTT IIIddst/Site Sivs Steelworke	EI3 LIIIGAI	+0.55 10013
		T.,		061400] .88934200 - System
751 OVERTIME BASE & PRE. Factors 17 h	C040 MAINTENANCE MACHINIST (incl Exp	KE10H IIndust/Site Srvs Steelworke	ers Linear	15.12 Hours
Tuciors II				0614001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworke	ers Linear	18.50 Hours
Factors 20.8 h			0.88934 [SVS]	0614001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworke	ers Linear	2.85 Hours
Factors 3.2 h				
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworke		0614001 .88934200 - Svstem 32.02 Hours
Factors 36 h	T OUT OF THE TANK TELLO	TILLIOI IIII MAGNOTIC SI VS SICCIWOTIC	Ellioni	JZ.OZII IOUIS
		T.,		0614001 .88934200 - System
751 OVERTIME BASE & PRE. Factors 20.8 h	C070 PAINTERS	KE10H Indust/Site Srvs Steelworke	ers Linear	18.50 Hours
				0614001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworke	ers Linear	64.03 Hours
Factors 72 h			0.88934 [SVS]	0614001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworke	ers Linear	9.78 Hours
Factors 11 h				204 4001 0000 4000 0 :
			0.88934 ISYS (061400] .88934200 - System

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Rocky Flats Closure Project Rasalina Cost and Rasis of Estimate

Proiect WBS Filter

Baseline Devl 1EFB

		Daseille Cost at	iu basis	o or Estimate	Activity Filter	*	Starts In FY *
751 OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers		Linear	12.45 Hours
Factors 14 h							
						0.88934 [SYS 06140	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers		Linear	27.57 Hours
Factors 31 h							
						0.88934 [SYS 06140	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers		Linear	8.89 Hours
Factors 10 h							
						0.88934 [SYS 06140	001 .88934200 - Svstem
A5C SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	9	Linear	49.802.26 Dollars
Factors 55999 d							

Line Item 3 - Preventive maintenance

0.88934 [SYS 061400] .88934200 - System

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 817 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$72.29 average

Unit Adjustment factor - FY99 is used as a base year. FY00 thru 03 are expected to be maintained at the same level as FY99. In FY04 it is expected that the maintenance requirements will drop due to PA closure and a requirement for less support personnel

Revised number of work orders - FY03-05 is 81.53% of FY99.

Basis for adjustment - Directed targets.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50% Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

s	Cost Element		Skill		Department	Curve	Ouantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	753.27	Hours
Factors	847 h							
						0.88934 [SYS 061400	01 .88934200 - \$	Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	564.73	Hours
Factors	635 h							
						0.88934 [SYS 061400	01 .88934200 - \$	System
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	86.09	Hours
Factors	96.8 h							
						0.88934 [SYS 061400	01 .88934200 - 9	System
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	37.35	Hours
Factors	42 h							
						0.88934 [SYS 061400	01 .88934200 - 9	System

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Rocky Flats Closure Project Rasalina Cost and Rasis of Estimate

Baseline Devl Proiect WBS Filter

1EFB

		Daseille Cost all	u basis	o or Estimate	Activity Filter	*	Starts In FY *
751 OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	S	Linear	28.46 Hours
Factors 32 h							
						0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	S	Linear	5.39 Hours
Factors 6.06 h							
						0.88934 [SYS 06140	01 .88934200 - Svstem
A5C SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenand	ce	Linear	5.507.69 Dollars
Factors 6193 d							

Line Item SYS - Contingency And Escalation

BOE

Resources

es	CON CONTINGENCY		Skill		Department		Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	15.511.41	Dollars
I	actors	15511.4 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	32.030.22	Dollars

Factors 32030.2 Dollars

Description: 130 Cluster Landlord Functions EY05

2 Schedule Risk

0.88934 [SYS 061400] .88934200 - System

ACTIVITY ID. IEA	Curity ID. 1 LAAA DOZZ Description. 130 Glaster Landiol 1 unctions, 1 100							Cost Risk Z Schedule Risk 1				
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
1	Corrective maintenance	1.00	each	НС	8.575	8.538	183.917	49.585	0	233.502	64.003	297.505
3	Preventive maintenance	1.00	each	HC	1.475	1.469	32.203	5.484	0	37.687	11.207	48.893
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	184.835	184.835	0	184.835
	Tot	Total for Activity 1EXXXB0025:					216.120	55.068	184.835	456.024	75.210	531.233

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

Approximately 2079 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$174.73 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 thru 03 are expected to be maintained at the same level as FY99. In FY04 it is expected that the maintenance requirements will drop due to PA closure and a requirement for less support personnel

Revised number of work orders - FY03-05 is 81.53% of FY99.

Basis for adjustment - Directed targets.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 30.77% (includes Linemen)

Maint. Mech 13.85% 10 77% Painter Pipefitter 23.08% Metal Worker 4.62%

Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

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					1	
D	C . El .	GI:II	The second secon		0	T T
Resources	Cost Element	Skill	Department	Curve	Ouantity	Units

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filter

Baseline Devl 1EFB

	Baseline C	OST and Basis of Estimate Activity Fil	ter * Starts In FY *
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 611.87 Hours
Factors 688 h			
			0.88934 [SYS 0614001.88934200 - System
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 377.08 Hours
Factors 424 h			0.00004 [0)/0.0044001 00004000 0
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400] .88934200 - Svstem Linear 564.73 Hours
Factors 635 h	I CUIU ICANFLINIERS	INE TO I THINGS FOR SIVE SIVE SIVE SIVE SIVE SIVE SIVE SIVE	Lineal 504.73Inouis
1 4010/3			0.88934
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 779.95 Hours
Factors 877 h			
			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 1.467.41 Hours
Factors 1650 h			
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	IVEAULT III de la	0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE Factors 100 h	I CUZU IELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 88.93 Hours
raciors IOO II			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (ir	ncl Exp KE10H Indust/Site Srvs Steelworkers	Linear 62.25 Hours
Factors 70 h			
			0.88934 ISYS 0614001 .88934200 - System
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (in	ncl Exp KE10H Indust/Site Srvs Steelworkers	Linear 313.94 Hours
Factors 353 h			
0		15 VEVOL 1 1/0% 0 00 1 1	0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	I C040 IMAINTENANCE MACHINIST (ir	ncl Exp KE10H Indust/Site Srvs Steelworkers	Linear 377.08 Hours
Factors 424 h			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	U.88934 STS 061400 .88934200 - System Linear 377.08 Hours
Factors 424 h	1 0070 II / MINTERO	TRE TOTT IMMUSE OF A OLECIWOTRETS	Elitedi 577.50[i loui3
121 11			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear 643.88 Hours
Factors 724 h			
			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	S KE10H Indust/Site Srvs Steelworkers	Linear 1.298.44 Hours
Factors 1460 h			0.00034 [CVC.064400] 00034300 Curatam
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	S KE10H Indust/Site Srvs Steelworkers	0.88934
Factors 230 h	1 COOU IF LOWIDLING AND FIFEFILLER	NETOTI IIIIQUSVOILE SIVS SIEEIWOIKEIS	Lineal 204.55Inouis
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			0.88934 ISYS 0614001 .88934200 - System
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	S KE10H Indust/Site Srvs Steelworkers	Linear 250.79 Hours
Factors 282 h			
			0.88934
750 STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL W	ORKE KE10H Indust/Site Srvs Steelworkers	Linear 554.95 Hours
Factors 624 h			0.0004 1010 0011001 00001
ZEO CEDALCHE TIME DACE	DOZO MARCE TREATMENT OPERAS	FOR A IVEAULI Indicat/Cita Caria Ctachward	0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE Factors 212 h	I KU/U IWASTE TREATMENT OPERAT	TOR A KE10H Indust/Site Srvs Steelworkers	Linear 188.54 Hours
raciois ZIZ []			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	U.88934 13 13 06 14 001 .88934 200 - System Linear 30.24 Hours
Factors 34 h	. SOLV INTELLIG	TE 1911 IIIIMAN ONO OLTO OLOGINOMOIS	. Emigai TOULETILIOGIS
			0.88934 [SYS 061400] .88934200 - System
			· · · · · · · · · · · · · · · · · · ·

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Baseline Devl WBS Filter 1EFB Activity Filter *

Starts In FY *

751 OVERTIME BASE & PRE. C010 CARPENTERS KE10H Indust/Site Srvs Steelworkers 28.46 Hours Linear Factors 0.88934 [SYS 061400] .88934200 - System 751 OVERTIME BASE & PRE C010 CARPENTERS KE10H Indust/Site Srvs Steelworkers 17.79 Hours Linear 20 Factors 0.88934 [SYS 061400] .88934200 - System C020 ELECTRICIANS 751 OVERTIME BASE & PRE KE10H Indust/Site Srvs Steelworkers 41.80 Hours Linear Factors 47 0.88934 [SYS 061400] .88934200 - System KE10H Indust/Site Srvs Steelworkers OVERTIME BASE & PRE C020 ELECTRICIANS Linear 40.55 Hours 45.6 h Factors 0.88934 [SYS 061400] .88934200 - System OVERTIME BASE & PRE C020 ELECTRICIANS 45,36 Hours 751 KE10H Indust/Site Srvs Steelworkers Linear Factors 0.88934 [SYS 061400] .88934200 - System 751 OVERTIME BASE & PRE C040 MAINTENANCE MACHINIST (incl Exp | KE10H | Indust/Site Srvs Steelworkers 15.12 Hours Linear Factors 17 0.88934 [SYS 061400] .88934200 - System C040 MAINTENANCE MACHINIST (incl Exp | KE10H | Indust/Site Srvs Steelworkers 18.50 Hours 751 OVERTIME BASE & PRE. Linear Factors 20.8 h 0.88934 [SYS 061400] .88934200 - System C040 MAINTENANCE MACHINIST (incl Exp | KE10H | Indust/Site Srvs Steelworkers 2.85 Hours OVERTIME BASE & PRE Linear Factors 32 0.88934 [SYS 061400] .88934200 - System C070 PAINTERS 751 OVERTIME BASE & PRE KE10H Indust/Site Srvs Steelworkers Linear 18 50 Hours 20.8 h Factors 0.88934 [SYS 061400] .88934200 - System 751 OVERTIME BASE & PRE. C070 PAINTERS KE10H Indust/Site Srvs Steelworkers 32.02 Hours Linear 36 Factors 0.88934 [SYS 061400] .88934200 - System OVERTIME BASE & PRE C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers 9.78 Hours 751 Linear Factors 11 0.88934 [SYS 061400] .88934200 - System C080 PLUMBERS AND PIPEFITTERS 12.45 Hours 751 OVERTIME BASE & PRE KE10H Indust/Site Srvs Steelworkers Linear Factors 14 0.88934 [SYS 061400] .88934200 - System C080 PLUMBERS AND PIPEFITTERS 751 OVERTIME BASE & PRE. KE10H Indust/Site Srvs Steelworkers 64 03 Hours Linear 72 Factors h 0.88934 [SYS 061400] .88934200 - System 751 OVERTIME BASE & PRE C090 STRUCTURAL AND METAL WORKE | KE10H | Indust/Site Srvs Steelworkers Linear 27.57 Hours 31 Factors 0.88934 [SYS 061400] .88934200 - System 751 OVERTIME BASE & PRE R070 WASTE TREATMENT OPERATOR A | KE10H | Indust/Site Srvs Steelworkers 8 89 Hours Linear 10 Factors 0.88934 [SYS 061400] .88934200 - System 49 802 26 Dollars A5C SUPPLIES 0000 NONE C210S Facilities Mgmt & Maintenance Linear Factors 55999 d

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster

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0.88934 [SYS 061400] .88934200 - System

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Activity Filter Baseline Devl 1EFB

Curve

Linear

Starts In FY

Ouantity

0.88934 [SYS 061400] .88934200 - System

Units

753.27 Hours

in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 817 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$72.29 average

Unit Adjustment factor - FY99 is used as a base year. FY00 thru 03 are expected to be maintained at the same level as FY99. In FY04 it is expected that the maintenance requirements will drop due to PA closure and a requirement for less support personnel

KE10H Indust/Site Srvs Steelworkers

Revised number of work orders - FY03-05 is 81.53% of FY99.

Basis for adjustment - Directed targets.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Cost Element

Maint. Mech 37.50%

Pipefitter 12.50%

750 STRAIGHT TIME BASE

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

C020 ELECTRICIANS

Resources

Factors 847 h				
			0.88934 [SYS 06140	01 .88934200 - Svstem
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIS	ST (incl Exp KE10H Indust/Site Srvs Steelworkers	Linear	564.73 Hours
Factors 635 h				
			0.88934 [SYS 06140	01 .88934200 - Svstem
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITT	TERS KE10H Indust/Site Srvs Steelworkers	Linear	86.09 Hours
Factors 96.8 h				
			0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	37.35 Hours
Factors 42 h				
			0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIS	ST (incl Exp KE10H Indust/Site Srvs Steelworkers	Linear	28.46 Hours
Factors 32 h				
			0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITT	TERS KE10H Indust/Site Srvs Steelworkers	Linear	5.39 Hours
Factors 6.06 h				
			0.88934 [SYS 06140	01 .88934200 - Svstem
A5C SUPPLIES	0000 NONE	C210S Facilities Momt & Maintenance	Linear	5.507.69 Dollars
Factors 6193 d				

Line Item SYS - Contingency And Escalation

BOE

Resources

es		Cost Element		Skill		Department	Curve	Quantity	Units
L	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	131.172.10	Dollars
الد.	Factors	131172 Dollars							
L	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	53.662.54	Dollars

Factors 53662.5 Dollars

ctivity ID: 1EFB	Description: 111 Cluster Landlord Function	ions, FY00						Cost Risk	2 Schedule R	Risk 1		
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost

 WBS No:
 1EFB02
 Rocky Flats Closure Project
 Project
 Baseline Devl

 Activity ID:
 1EFB0035
 Baseline Cost and Basis of Estimate
 WBS Filter
 1EFB

		Dasci	ine oost an	ia Basis oi E	-Stilliate	Acti	vity Filter *		St	arts In FY *	
			Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost	iris in i i	
1	Corrective maintenance	1.00 each	HC	1.951	1.951	42.023	17.627	0	59.650	20.507	80.157
1a	Corrective maintenance	0.79 each	HC	2.154	1.702	36.702	9.786	0	46.488	17.911	64.399
3	Preventive maintenance	1.00 each	HC	374	374	8,195	1,958	0	10,153	3,999	14,152
3a	Preventive maintenance	0.79 each	HC	363	287	6,290	1,087	0	7,377	3,069	10,446
	To	tal for Activity 1EF	B0035:		4.314	93.209	30.459	0	123,668	45.486	169,155

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

Approximately 837 corrective/routine maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$344.13 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 77% of the FY 99 budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficency return.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 32.31% (includes Linemen)

Cost Element

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Skill

Resources

750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	143.22 Hours
Factors 286 h	0.3612 May 2000 Earned	d Value Factor		
			1.38645 [SYS 06130	001 1.386448 - Target
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	155.24 Hours
Factors 310 h	0.3612 May 2000 Earned	d Value Factor		
			1.38645 [SYS 06130	001 1.386448 - Target
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	95.65 Hours
Factors 191 h	0.3612 May 2000 Earner	d Value Factor		
			1.38645 [SYS 06130	001 1.386448 - Target
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	230.86 Hours
Factors 461 h	0.3612 May 2000 Earner	d Value Factor		
			1.38645 [SYS 06130	001 1.386448 - Target
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	206.82 Hours
Factors 413 h	0.3612 May 2000 Earned	d Value Factor		
			1.38645 [SYS 06130	001 1.386448 - Target

Department

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Curve

Ouantity

Units

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Baseline Devl
WBS Filter 1EFB
Activity Filter *

	Baseline Cost	t and Basis of Estimate Activity Filte	er * Starts In FY *
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 47.57 Hours
Factors 95 h	0.3612 May 2000 Earned Value		
			1.38645 [SYS 061300] 1.386448 - Target
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 197.81 Hours
Factors 395 h	0.3612 May 2000 Earned Value	Factor	
			1.38645 [SYS 061300] 1.386448 - Target
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl F	Exp KE10H Indust/Site Srvs Steelworkers	Linear 95.65 Hours
Factors 191 h	0.3612 May 2000 Earned Value	Factor	
			1.38645 [SYS 061300] 1.386448 - Target
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl F	Exp KE10H Indust/Site Srvs Steelworkers	Linear 79.62 Hours
Factors 159 h	0.3612 May 2000 Earned Value	Factor	
			1.38645 [SYS 061300] 1.386448 - Target
750 STRAIGHT TIME BASE		Exp KE10H Indust/Site Srvs Steelworkers	Linear 16.03 Hours
Factors 32 h	0.3612 May 2000 Earned Value	Factor	
			1.38645 [SYS 061300] 1.386448 - Target
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear 95.65 Hours
Factors 191 h	0.3612 May 2000 Earned Value	Factor	
			1.38645 [SYS 061300] 1.386448 - Target
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear 163.26 Hours
Factors 326 h	0.3612 May 2000 Earned Value	Factor	
			1.38645 [SYS 061300] 1.386448 - Target
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear 61.60 Hours
Factors 123 h	0.3612 May 2000 Earned Value	Factor	
			1.38645 [SYS 061300] 1.386448 - Target
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear 51.58 Hours
Factors 103 h	0.3612 May 2000 Earned Value	Factor	
		1.,	1.38645 [SYS 061300] 1.386448 - Target
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear 63.60 Hours
Factors 127 h	0.3612 May 2000 Earned Value	Factor	4 000 45
OTD 41011T TU45 D 405	L constantination with the second	45 1454011 1 1 40° 0 0 1 1	1.38645 [SYS 061300] 1.386448 - Target
750 STRAIGHT TIME BASE		KE KE10H Indust/Site Srvs Steelworkers	Linear 140.72 Hours
Factors 281 h	0.3612 May 2000 Earned Value	Factor	4 00045 [0)/O 004000] 4 000440 T
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	1.38645 [SYS 061300] 1.386448 - Target Linear 7.01 Hours
	0.3612 May 2000 Earned Value		Linear 7.01 Hours
Factors 14 h	0.3012 IVIAY 2000 Earned Value	Facioi	1,38645 [SYS 061300] 1,386448 - Target
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 5.01 Hours
Factors 10 h	0.3612 May 2000 Earned Value		LINEAI 3.01INOUIS
raciois IO II	0.3012 Iviay 2000 Earried Value	: I acitoi	1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 7.51 Hours
Factors 15 h	0.3612 May 2000 Earned Value		LINGAI 1.511FIOUIS
Tuctors IO II	0.3012 IVIAY 2000 Lattled Value	1 40101	1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 11.52 Hours
Factors 23 h	0.3612 May 2000 Earned Value		i i i i i i i i i i i i i i i i i i i
20073 ZO II	0.0012 IVIAY 2000 Lameu Value	1 40101	1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 2.50Hours
Factors 5 h	0.3612 May 2000 Earned Value		Linear 2.3011 louis
Tuciois O II	0.3012 IVIAY 2000 Lattled Value	1 uoloi	1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 10.52 Hours
Factors 21 h	0.3612 May 2000 Earned Value		I I I I I I I I I I I I I I I I I I I
Z 1 11	0.0012 May 2000 Lamed Value	1 40101	1.38645 [SYS 061300] 1.386448 - Target

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WBS No: Activity ID:

1EFB02 1EFB0035

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl 1EFB

	Daseille Cost	Activity Filter	*	Starts In FY *
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	10.02 Hours
Factors 20 h	0.3612 May 2000 Earned Value	Factor		
			1.38645 [SYS 061300	l 1.386448 - Target
751 OVERTIME BASE & PRE.		xp KE10H Indust/Site Srvs Steelworkers	Linear	4.01 Hours
Factors 8 h	0.3612 May 2000 Earned Value	Factor		
	T		1.38645 ISYS 061300	
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl E		Linear	5.01 Hours
Factors 10 h	0.3612 May 2000 Earned Value	Factor	1 000 15 10 10 00 10 00	N 4 000440 T
754 OVEDTIME DAGE 8 DDE	COAO MAINTENANCE MACHINICT (in al E	VE4011 Indust/Oits On a Ots should be	1.38645 ISYS 061300	01 1.386448 - Target 1.00 Hours
751 OVERTIME BASE & PRE.	I C040 IMAINTENANCE MACHINIST (incl E 0.3612 May 2000 Earned Value	xp KE10H Indust/Site Srvs Steelworkers	Linear	1.00IHours
Factors 2 h	0.3612 May 2000 Earned Value	Factor	1.38645 [SYS 061300	11 1 206440 Torget
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	1.30043 1313 001300 Linear	5.01 Hours
Factors 10 h	0.3612 May 2000 Earned Value		Lilleal	J.0 HI 10015
Tuctors 10 II	0.3012 Way 2000 Lamed Value	i actor	1.38645 [SYS 061300	11 1 386448 - Target
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	8.01 Hours
Factors 16 h	0.3612 May 2000 Earned Value	Factor		
			1.38645 ISYS 061300)] 1.386448 - Target
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	2.50 Hours
Factors 5 h	0.3612 Mary 2000 Earned Value	Factor		
			1.38645 [SYS 061300	
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	3.00 Hours
Factors 6 h	0.3612 May 2000 Earned Value	Factor		
			1.38645 [SYS 061300	
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	16.53 Hours
Factors 33 h	0.3612 May 2000 Earned Value	Factor	1 000 15 10 10 00 10 00	N 4 000440 T
751 OVERTIME BASE & PRE.	C090 STRUCTURAL AND METAL WORK	VE 1/E1011 Indust/Cita Crus Stanlausrkers	1.38645 [SYS 061300	7.01 Hours
	0.3612 May 2000 Earned Value		Linear	7.011Hours
Factors 14 h	0.3012 May 2000 Earned Value	Faciui	1.38645 [SYS 061300	11 1 386///8 - Target
A5C SUPPLIES	0000 NONE	C210S Facilities Mgmt & Maintenance	Linear	17.627.22 Dollars
Factors 34679 d	1.015 FY00 Escalation	0.3612 May 2000 Earned Value Factor	LIIIGAI	11.021.22IDOIIdIS
1 deletes 0 1010 d	1.010 1100 2000101011	0.0012 May 2000 Earnor Value I dolor	1.38645 [SYS 061300)] 1.386448 - Target

Line Item 1a - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 395 corrective/routine maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$394.56 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 79% of the FY 99 budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficency return.

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Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Activity Filter

Baseline Devl 1EFB

Starts In FY *

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38% Electrician 32.31% (includes Linemen)

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity Units
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	139.18 Hours
Factors 277.92 h	0.3612 May 2000 Earned	Value Factor		
				001 1.386448 - Target
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	92.79 Hours
Factors 185.28 h	0.3612 May 2000 Earned	Value Factor		
			1.38645 [SYS 0613	
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	150.78 Hours
Factors 301.09 h	0.3612 May 2000 Earned	Value Factor		
	T I			001 1.386448 - Target
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	46.39 Hours
Factors 92.64 h	0.3612 May 2000 Earned	Value Factor		
=== 0===10.1==114==145	Cook ELECTRICIANO	VE1011 1 1 1/0/2 0 0: 1 1	1.38645 [SYS 0613	
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	201.04 Hours
Factors 401.44 h	0.3612 May 2000 Earned	value Factor	1 000 15 10 10 00 10	001.4.000.440. T
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	1.38645 [SYS 0613] Linear	192.01 Hours
			Linear	192.011Hours
Factors 383.41 h	0.3612 May 2000 Earned	value Factor	4 2004F ISVS 0642	001 4 200440 Torrest
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	1.38645 [SYS 0613 Linear	224.21 Hours
Factors 447.71 h	0.3612 May 2000 Earned		Lilleai	ZZ4.Z IIHOUIS
raciors 447.71 II	0.3012 Way 2000 Lamed	value i actor	1.38645 [SYS 0613	00] 1 396448 Target
750 STRAIGHT TIME BASE	COAD MAINTENANCE MACHINIST	(incl Exp KE10H Indust/Site Srvs Steelworkers	Linear	92.79 Hours
Factors 185.28 h	0.3612 May 2000 Earned		Lincar	32.731110013
1 46:075 100:20 11	0.5012 Way 2000 Earned	Value I doloi	1.38645 [SYS 0613	00] 1 386448 - Target
750 STRAIGHT TIME BASE	CO40 MAINTENANCE MACHINIST	(incl Exp KE10H Indust/Site Srvs Steelworkers	Linear	15.46 Hours
Factors 30.88 h	0.3612 May 2000 Earned			10110110110
00.00	0.0012		1.38645 [SYS 0613	001 1.386448 - Target
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST	(incl Exp KE10H Indust/Site Srvs Steelworkers	Linear	77.32 Hours
Factors 154.4 h	0.3612 May 2000 Earned			
			1.38645 [SYS 0613	001 1.386448 - Target
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	92.79 Hours
Factors 185.28 h	0.3612 May 2000 Earned	Value Factor		
			1.38645 [SYS 0613	001 1.386448 - Target
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	158.50 Hours
Factors 316.5 h	0.3612 May 2000 Earned	Value Factor		
			1.38645 [SYS 0613	001 1.386448 - Target
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTE	RS KE10H Indust/Site Srvs Steelworkers	Linear	50.24 Hours
Factors 100.33 h	0.3612 May 2000 Earned	Value Factor		
			1.38645 [SYS 0613	
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTE		Linear	61.86 Hours
Factors 123.52 h	0.3612 May 2000 Earned	Value Factor		
			1.38645 [SYS 0613	001 1.386448 - Target

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filter

Baseline Devl 1EFB

	baseline Co	St and Basis of Estimate	ctivity Filter *	Starts In FY *
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	319.64 Hours
Factors 638.28 h	0.3612 May 2000 Earned Valu	ie Factor		
			1.38645 [SYS 06130	
750 STRAIGHT TIME BASE		RKE KE10H Indust/Site Srvs Steelworkers	Linear	136.60 Hours
Factors 272.77 h	0.3612 May 2000 Earned Valu	ie Factor		
			1.38645 ISYS 06130	
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	4.64 Hours
Factors 9.26 h	0.3612 May 2000 Earned Valu	ie Factor	4 20045 1000 0040	001.4.000440 T+
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	1.38645 [SYS 06130 Linear	6.96 Hours
Factors 13.9 h	0.3612 May 2000 Earned Valu		Lineal	0.301110013
10.0	0.0012 Way 2000 Earnou Valo	io i dotoi	1.38645 [SYS 06130	001 1 386448 - Target
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	7.54 Hours
Factors 15.05 h	0.3612 May 2000 Earned Valu			
			1.38645 ISYS 06130	001 1.386448 - Target
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	11.21 Hours
Factors 22.39 h	0.3612 May 2000 Earned Valu	ie Factor		
			1.38645 [SYS 06130	001 1.386448 - Target
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	2.32 Hours
Factors 4.63 h	0.3612 May 2000 Earned Valu	ie Factor		
			1.38645 [SYS 06130	
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	10.05 Hours
Factors 20.07 h	0.3612 May 2000 Earned Valu	ie Factor	4 000 45 100 40 00 40 4	201.4.000.440 T
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	1.38645 [SYS 06130 Linear	9.60 Hours
·	0.3612 May 2000 Earned Valu		Linear	9.00 110015
Factors 19.17 h	0.3012 May 2000 Earned Valu	ie Facioi	1.38645 [SYS 06130	001 1 296449 Target
751 OVERTIME BASE & PRE.	CO40 MAINTENANCE MACHINIST (incl	Exp KE10H Indust/Site Srvs Steelworkers	Linear	4.64 Hours
Factors 9.26 h	0.3612 May 2000 Earned Valu		Linear	4.04)110013
1 00000	0.0012 ma, 2000 2amea valo		1.38645 [SYS 06130	001 1.386448 - Target
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl	Exp KE10H Indust/Site Srvs Steelworkers	Linear	3.87 Hours
Factors 7.72 h	0.3612 May 2000 Earned Valu	ie Factor		
			1.38645 [SYS 06130	001 1.386448 - Target
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl	Exp KE10H Indust/Site Srvs Steelworkers	Linear	0.77 Hours
Factors 1.54 h	0.3612 May 2000 Earned Valu	ie Factor		
			1.38645 [SYS 06130	
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	7.92 Hours
Factors 15.82 h	0.3612 May 2000 Earned Valu	ie Factor		
		T.,	1.38645 [SYS 06130	
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	4.64 Hours
Factors 9.26 h	0.3612 May 2000 Earned Valu	ie Factor	4 20045 1000 00400	201.4.202.440 T
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	1.38645 [SYS 06130 Linear	2.51 Hours
Factors 5.02 h	0.3612 May 2000 Earned Valu		Lilleal	2.511110015
- WOLD 11	0.0012 IVIAY 2000 Lailleu Valu	1 400	1.38645 [SYS 06130	001 1 386448 - Target
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	15.98 Hours
Factors 31.91 h	0.3612 May 2000 Earned Valu		, EILIVAI	. C.OOII IOMIO
			1.38645 [SYS 06130	001 1.386448 - Target
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	3.09 Hours
Factors 6.18 h	0.3612 May 2000 Earned Valu			
			1.38645 [SYS 06130	00] 1.386448 - Target

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Rocky Flats Closure Project Resoling Cost and Resis of Estimate

Baseline Devl Proiect WBS Filter 1EFB

1.38645 [SYS 061300] 1.386448 - Target

				Baccinio Georgi		or zoumato	Activity Filter	*	Starts In FY *
751	OVERTIME BASE & PRE.	C090	STRUCTL	IRAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	3	Linear	6.83 Hours
Factors	13.64 h		0.3612	Mary 2000 Earned Value Fa	ctor				
								4 000 45 70) 40 00 400	01 4 000 4 40 T
								1.38645 [SYS 06130	01 1.386448 - Target
A5C	SUPPLIES	0000	NONE		C210S	Facilities Mamt & Maintenand	ce	1.38645 ISYS 061300 Linear	0 1.386448 - Farget 12.387.17 Dollars

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS. Approximately 335 preventative maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Data Source - MMS and P&I Reporting System SVAR for FY98 Item Desc - Fiscal Year Preventive Maintenance Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$139.79 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 77% of the FY 99 budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficency return.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50% Pipefitter 12 50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

s	Cost Element	Skill	Department	Curve	Ouantity Units
75	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	191.30 Hours
Facto	<i>rs</i> 382 h	0.3612 May 2000 Earned Value Fa	actor		
_				1.38645 [SYS 06130	01 1.386448 - Target
75	STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear	143.22 Hours
Facto	<i>rs</i> 286 h	0.3612 May 2000 Earned Value Fa	actor		
_				1.38645 [SYS 06130	01 1.386448 - Target
75	STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	22.03 Hours
Facto	<i>rs</i> 44 h	0.3612 May 2000 Earned Value Fa	actor		
_				1.38645 [SYS 06130	01 1.386448 - Target
75	OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	9.51 Hours
Facto	<i>rs</i> 19 h	0.3612 May 2000 Earned Value Fa	actor		
				1.38645 [SYS 06130	01 1.386448 - Target
75	OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear	7.01 Hours
Facto	<i>rs</i> 14 h	0.3612 May 2000 Earned Value Fa	actor		
				1.38645 [SYS 06130	01 1.386448 - Target
75	OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	1.00 Hours
Facto	rs 2 h	0.3612 May 2000 Earned Value Fa	actor		
		· · · · · · · · · · · · · · · · · · ·		1.38645 [SYS 06130	01 1.386448 - Target

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Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter

Baseline Devl 1EFB

u _uo.o	Activity Filter	*	Starts In FY *
C210S	Facilities Mamt & Maintenance	Linear	1.958.47 Dollars

Factors 1.015 -- FY00 Escalation --3853 d 0.3612 May 2000 Earned Value Factor

1.38645 [SYS 061300] 1.386448 - Target

Line Item 3a - Preventive maintenance

A5C SUPPLIES

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 125 preventative maintenance work actions are expected.

0000 NONE

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$202.17 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 79% of the FY 99 budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficency return.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50% Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

_					
Resources		Skill	Department	Curve	Ouantity Units
	750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	185.57 Hours
	Factors 370.56 h	0.3612 May 2000 Earned Value Fac	ctor		
				1.38645 [SYS 06130	01 1.386448 - Target
	750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear	139.18 Hours
	Factors 277.92 h	0.3612 May 2000 Earned Value Fac	ctor		
				1.38645 [SYS 06130	0] 1.386448 - Target
	750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	21.23 Hours
	Factors 42.4 h	0.3612 May 2000 Earned Value Fac			
	12.1	0.0012 May 2000 Earnod Value 1 a	0.001	1.38645 [SYS 06130	0] 1 386448 - Target
	751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	9.28 Hours
	Factors 18.53 h	0.3612 May 2000 Earned Value Fac		Linear	3.20110013
	<i>Puctors</i> 10.55 II	0.3012 Way 2000 Lamed Value I a	CiOi	1.38645 [SYS 06130	0] 1 396449 Target
	751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Stree Steelworkers	Linear	6.96 Hours
				Lilleal	6.96jH0uis
	Factors 13.9 h	0.3612 May 2000 Earned Value Fac	ctor	1 000 15 10 10 00 100	0] 4 000440 T
		T I	I	1.38645 [SYS 06130	
	751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	1.06 Hours
	Factors 2.12 h	0.3612 May 2000 Earned Value Fac	ctor		
				1.38645 [SYS 06130	0] 1.386448 - Target
	A5C SUPPLIES	0000 NONE	C210S Facilities Momt & Maintenance	Linear	1.376.35 Dollars
	Factors 1.015 FY00 Escalation	2707.77 d	0.3612 May 2000 Earned Value Factor		
				1.38645 [SYS 06130	0] 1.386448 - Target
Activity ID:	1EFB0040 Description: 111 Clu	ster Landlord Functions, FY01	Cost Risk	2 Schedule Risk	1

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect

Baseline Devl

WBS Filter	1EFB	
A saissias Eilass	*	

		· ·					Acti	vity Filter		Sta	arts In FY	
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
1	Corrective maintenance	1.00	each	HC	3.940	3.940	84.981	31.304	0	116.285	40.536	156.821
1a	Corrective maintenance	0.79	each	HC	3.826	3.022	65.180	17.379	0	82.558	31.091	113.649
3	Preventive maintenance	1.00	each	HC	664	664	14.553	3.478	0	18.031	6.942	24.973
3a	Preventive maintenance	0.79	each	HC	645	510	11.170	1.931	0	13.101	5.328	18.429
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	16.604	16.604	0	16.604
	Tot	al for Activi	ty 1EFB0040):		8.136	175.883	54.092	16.604	246.579	83.896	330.475

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

Approximately 837 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$344.13 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 77% of the FY 99 budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficency return.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 32.31% (includes Linemen)

Maint. Mech 13.85% Painter 10.77% Pipefitter 23 08% Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

s	Cost Element		Skill		Department	Curve	Ouantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	254.35	Hours
Factors	286 h							
						0.88934 [SYS 06140	01 .88934200 - \$	System
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	169.86	Hours
Factors	191 h							
						0.88934 [SYS 06140	01 .88934200 - \$	System
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	275.70	Hours
Factors	310 h							
						0.88934 [SYS 06140	01 .88934200 - 9	System
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	409.99	Hours
Factors	461 h							
						0.88934 [SYS 06140	01 .88934200 - \$	System
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	351.29	Hours
Factors	395 h							
						0.88934 [SYS 06140	01 .88934200 - 9	System

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Ba
WBS Filter 1E
Activity Filter *

Baseline Devl 1EFB

1EFB0040	Baseline Cos	st and Basis of Estimate	WBS Filter 1EFB Activity Filter *	Starts In FY *
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworke		84.49 Hours
Factors 95 h			0.0004 1000	4 400] 0000 4000 0 4
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworke		14001 .88934200 - Svstem 367.30 Hours
Factors 413 h	1 0020 ILLECTRICIANO	TIL TOTT IIII QUSVOITE SIVS STEETWOINE	Lilledi	307.301110013
				14001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl	Exp KE10H Indust/Site Srvs Steelworke	rs Linear	28.46 Hours
Factors 32 h			.a. 2721 18088 U	14001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl	Exp KE10H Indust/Site Srvs Steelworke	rs Linear	141.41 Hours
Factors 159 h				
		_		14001 .88934200 - Svstem
750 STRAIGHT TIME BASE Factors 191 h	I C040 IMAINTENANCE MACHINIST (incl	Exp KE10H Indust/Site Srvs Steelworke	rs Linear	169.86 Hours
raciors 191 II			0.88934 ISYS 06	14001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworke		289.93 Hours
Factors 326 h				
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworke		14001 .88934200 - Svstem 169.86 Hours
Factors 191 h	I CO/O IPAINTERS	RETUH lindust/Site Srvs Steelworke	rs Linear	169.86IHOUIS
			0.88934 ISYS 06	14001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworke	rs Linear	112.95 Hours
Factors 127 h			0.00004 10000.00	4 4001 0000 4000 0
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworke		1400] .88934200 - System 584.30 Hours
Factors 657 h	7 COOC LOWIDLING / WAD I II LITTIENCE	TRETOTT IMIGUSVOICE STVS SICCIWOTIC	- Enical	004.00[10013
			0.88934 [SYS 06	1400] .88934200 - System
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworke	rs Linear	91.60 Hours
Factors 103 h			0.9024 1575.05	1400] .88934200 - System
750 STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL WOR	RKE KE10H Indust/Site Srvs Steelworke		249.91 Hours
Factors 281 h				
				14001 .88934200 - Svstem
751 OVERTIME BASE & PRE. Factors 15 h	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworke	rs Linear	13.34 Hours
Factors 15 h			0.88934 [SYS 06	14001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworke		12.45 Hours
Factors 14 h				
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworke		14001 .88934200 - Svstem 8.89 Hours
Factors 10 h	COTO ICARPENTERS	RETUR IIIIdust/Site Sivs Steelworke	rs Linear	0.09IPOUIS
				14001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworke	rs Linear	17.79 Hours
Factors 20 h			0.00004 10000.00	4 4001 0000 4000 0 4
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworke		14001 .88934200 - Svstem 20.45 Hours
Factors 23 h	1 OVEV ILLEGINIONING	TETOTI IIIIGGSVOIGE ON S SIEEIWOINE	Lilical	20.451110015
-			0.88934 ISYS 06	14001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworke	rs Linear	4.45 Hours
Factors 5 h			0 99034 TeVe 0e	1400] .88934200 - System
			0.0034 313 00	17001.00304200 - 3yalelii

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl 1EFB

121 200 10	Baseline Cost a	nd Basis of Estimate	Activity Filter *	Starts In FY *
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworke		18.68 Hours
Factors 21 h				
				4001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworke	ers Linear	8.89 Hours
Factors 10 h			0.00004 10000	4001 0000 4000 Contains
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Stys Steelworks		4001 .88934200 - Svstem 7.11 Hours
Factors 8 h	T COTO INVANT ENVANCE INVACIONATION CONTRACTOR CONTRACT	TILL TOTAL IIII GUSVOICE OF VS OLCHWOTH	JIS EIIICAI	7.111110013
			0.88934 [SYS 061	4001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworke	ers Linear	1.78 Hours
Factors 2 h				
1				4001 .88934200 - System
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworke	ers Linear	14.23 Hours
Factors 16 h			0.88034 1575 061	4001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworke		8.89 Hours
Factors 10 h	T SOLO IL TIMETO			0.0011.10410
			0.88934 [SYS 061	4001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworke	ers Linear	4.45 Hours
Factors 5 h				
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworke		4001 .88934200 - Svstem 5.34 Hours
Factors 6 h	C080 IPLUMBERS AND PIPEFITTERS	KETUH Indust/Site Srvs Steelworke	ers Linear	5.34JH0UIS
raciois 0 II			0.88934 [SYS.061	4001 .88934200 - System
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworke		29.35 Hours
Factors 33 h				
				400] .88934200 - System
751 OVERTIME BASE & PRE.	C090 STRUCTURAL AND METAL WORKE	KE10H Indust/Site Srvs Steelworke	ers Linear	12.45 Hours
Factors 14 h			0.00004 100/0.004	4001 0000 4000 0 4
A5C SUPPLIES	0000 NONE	C210S Facilities Mgmt & Maintena		400] .88934200 - System 31.304.11 Dollars
Factors 34679 d	1.015 FY00 Escalation	C2105 Facilities Multil & Maintena	liice Linear	31.304.111D0llars
1 ucions 04010 u	1.013 1 100 L30alati011		0.88934 ISYS 061	4001 .88934200 - Svstem
			0.0000. (0.000.	

Line Item 1a - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 395 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$394.56 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 79% of the FY 99 budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficency return.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

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Activity ID: 1EFB0040

Rockv Flats Closure Proiect

Baseline Cost and Basis of Estimate

Proiect
WBS Filter
1EFB
Activity Filter
*

Electrician 32.31% (includes Linemen)
Maint. Mech 13.85%

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

1EFB02

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

WBS No:

	Cost Element	Skill	Department	Curve	Ouantity Units
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	247.17 Hours
Factors	277.92 h				
				0.88934 [SYS 061400	
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	164.78 Hours
Factors	185.28 h				
		T		0.88934 [SYS 061400	01 .88934200 - Svstem
	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	267.77 Hours
Factors	301.09 h				
		T I	1	0.88934 [SYS 061400	
	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	82.39 Hours
Factors	92.64 h				
750	OTD A IOLIT TIME DAGE	Occo ELECTRICIANO	1/54011 1 1 1/0" 0 0: 1 1	0.88934 [SYS 061400	
	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	340.98 Hours
Factors	383.41 h			0.88934 [SYS 061400	01 00024200 System
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	0.88934 1313 001400 Linear	357.02 Hours
Factors	401.44 h	COZO JELECTRICIANO	RETUIT IIIIdasi/Site Sivs Steelworkers	Lilleal	337.02ji louis
1 actors	401.44 11			0.88934 [SYS 061400	11 88934200 - System
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	398.17 Hours
Factors	447.71 h	7 0020 122011110171110	TICE TOTAL IMPOSSION OF CHARGE OF CONTROLS	Emodi	000.171110010
				0.88934 [SYS 061400	01 .88934200 - System
750	STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (inc	Exp KE10H Indust/Site Srvs Steelworkers	Linear	137.31 Hours
Factors	154.4 h				
				0.88934 [SYS 061400	01 .88934200 - Svstem
750	STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (inc	Exp KE10H Indust/Site Srvs Steelworkers	Linear	164.78 Hours
Factors	185.28 h				
				0.88934 [SYS 061400	01 .88934200 - Svstem
750	STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (inc	Exp KE10H Indust/Site Srvs Steelworkers	Linear	27.46 Hours
Factors	30.88 h				
		T		0.88934 [SYS 061400	
	STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	281.48 Hours
Factors	316.5 h				
		T I	1	0.88934 ISYS 061400	
	STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	164.78 Hours
Factors	185.28 h				
750	CTDAICLIT TIME DACE	COOC DILIMPEDO AND DIDEFITTEDO	KE4011 Indust/Oite Once Ote should be	0.88934 [SYS 061400	
	STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	109.85 Hours
Factors	123.52 h			0.00024 ISVS 064404	01 00004000 Custom
750	STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400 Linear	71 .88934200 - System 89.23 Hours
Factors	100.33 h	I GOOD IFLUIVIDERS AND FIFEFITIERS	I NE TOTI III III III III III STVS SIEEIWOTKEIS	Lilleal	09.ZSITIOUIS
raciois	100.33 11			0.88934 [SYS 061400	11 88934200 - Systom
750	STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 1313 061400 Linear	567.65 Hours
7 00		1 COOL II EDIVIDEIXO AIND LIFELITTEIXO	TIL TOTT HINGUS/ONE OFF OFF OFFICE WOLKERS	Lilleal	307.03110015
Factors	638.28 h				

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Starts In FY *

WBS No: 1EFB02 1EFB0040 Activity ID:

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Activity Filte

Baseline Devl 1EFB *

1EFB0040	Baseline Cost an	nd Basis of E	Stimate	BS Filter 1EFB tivity Filter *	Starts In FY *
750 STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL WORKE	KE10H Indu		Linear	242.59 Hours
Factors 272.77 h				0.00004 [0.000.004.4	001 00004000 - 0
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KF10H Indu	st/Site Srvs Steelworkers	0.88934 ISYS 0614 Linear	001 .88934200 - Svstem 13.38 Hours
Factors 15.05 h					
754 01/507145 0405 4 005	OO40 OARDENTERO	1/54011 1 1	./0: 0 0: 1 1		001 .88934200 - Svstem 12.36 Hours
751 OVERTIME BASE & PRE. Factors 13.9 h	C010 CARPENTERS	KE10H IIndu	st/Site Srvs Steelworkers	Linear	12.36lHours
1 40.00				0.88934 [SYS 0614	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indu	st/Site Srvs Steelworkers	Linear	8.24 Hours
Factors 9.26 h				0.88934 [575.0614	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indu	st/Site Srvs Steelworkers	U.88354 1818 0014 Linear	17.85 Hours
Factors 20.07 h					
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE4011 India	ot/Cita Cruo Ctaaluuarkara		001 .88934200 - Svstem 19.91 Hours
Factors 22.39 h	C020 ELECTRICIANS	KETUH IINGU	st/Site Srvs Steelworkers	Linear	19.91IHours
				0.88934 [SYS 0614	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indu	st/Site Srvs Steelworkers	Linear	4.12 Hours
Factors 4.63 h				0.88034 [SVS 0614	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indu	st/Site Srvs Steelworkers	U.88934 1313 0614	17.05 Hours
Factors 19.17 h					
754 OVEDTIME DAGE & DDE	C040 MAINTENANCE MACHINIST (incl Exp	1/54011 1 1	./0: 0 0: 1 1		00] .88934200 - System 1.37 Hours
751 OVERTIME BASE & PRE. Factors 1.54 h	C040 IMAINTENANCE MACHINIST (Incl Exp	KETUH IINGU	St/Site Srvs Steelworkers	Linear	1.37 HOURS
1.01				0.88934 [SYS 0614	00] .88934200 - System
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indu	st/Site Srvs Steelworkers	Linear	6.87 Hours
Factors 7.72 h				0.99034 [SVS 0614	00] .88934200 - System
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indu	st/Site Srvs Steelworkers	0.88934 313 0614 Linear	8.24 Hours
Factors 9.26 h					
OVEDTUE DAGE & DDE	0070 04447500		./0: 0 0: 1 1		001 .88934200 - Svstem
751 OVERTIME BASE & PRE. Factors 9.26 h	C070 PAINTERS	KE10H IIndu	st/Site Srvs Steelworkers	Linear	8.24 Hours
7.20 11				0.88934 [SYS 0614	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indu	st/Site Srvs Steelworkers	Linear	14.07 Hours
Factors 15.82 h				0.00024 [5V5.0644	001 00024200 Custom
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indu	st/Site Srvs Steelworkers	0.88934 1313 0614 Linear	001 .88934200 - Svstem 5.50 Hours
Factors 6.18 h					
					001 .88934200 - Svstem
751 OVERTIME BASE & PRE. Factors 31.91 h	C080 PLUMBERS AND PIPEFITTERS	KE10H IIndu	st/Site Srvs Steelworkers	Linear	28.38 Hours
14013 31.91 11				0.88934 [SYS 0614	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indu	st/Site Srvs Steelworkers	Linear	4.46 Hours
Factors 5.02 h				0.00004 10000 0044	001 00004000 0::
751 OVERTIME BASE & PRE.	C090 STRUCTURAL AND METAL WORKE	KF10H Indu	st/Site Srvs Steelworkers	0.88934 ISYS 0614 Linear	001 .88934200 - Svstem 12.13 Hours
Factors 13.64 h	. SVVV ISTINGUISTANE AND INIETAE WORKE		CLUMO OTTO OTCOMORNOIS	<u> </u>	. IZ. IOII IOUIS
				0.88934 [SYS 0614	00] .88934200 - System

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Baseline Devl WBS Filter 1EFB

 Activity Filter
 *
 Starts In FY
 *

 e
 Linear
 21.998.33 Dollars

Curve

 A5C
 SUPPLIES
 0000
 NONE

 Factors
 24370
 d
 1.015
 -- FY00 Escalation -

Line Item 3 - Preventive maintenance

0.88934 [SYS 061400] .88934200 - System

Quantity

0.88934 [SYS 061400] .88934200 - System

Units

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS. Approximately 335 preventative maintenance work actions are expected.

C210S Facilities Momt & Maintenance

Department

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$139.79 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 77% of the FY 99 budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficency return.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Cost Element

Maint. Mech 37.50% Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	339.73 Hours
Factors 382 h				
			0.88934 [SYS 061400]	.88934200 - System
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear	254.35 Hours
Factors 286 h				
			0.88934 [SYS 061400]	.88934200 - Svstem
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	39.13 Hours
Factors 44 h				
			0.88934 [SYS 061400]	.88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	16.90 Hours
Factors 19 h				
			0.88934 [SYS 061400]	.88934200 - Svstem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear	12.45 Hours
Factors 14 h				
			0.88934 [SYS 061400]	.88934200 - Svstem
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	1.78 Hours
Factors 2 h				
			0.88934 [SYS 061400]	.88934200 - Svstem
A5C SUPPLIES	0000 NONE	C210S Facilities Momt & Maintenance	Linear	3.478.03 Dollars
Factors 1.015 FY00 Escalation	3853 d			

Line Item 3a - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filter

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Baseline Devl

* Starts In FY

Curve

Ouantity

Units

maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 125 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$202.17 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 79% of the FY 99 budget per FCP 1999-8064

Department

Basis for adjustment - FCP 1999-8064 funding efficency return.

The percentage of maintenance effort (labor Type) required is as follows:

... 111 Cluster Landlard Eunstiana EV02

Electrician 50.00% (includes Linemen)

Cost Element

Maint. Mech 37.50% Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Skill

Resources

750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	329.55lHours		
Factors 370.56 h						
			0.88934 [SYS 06140	01 .88934200 - Svstem		
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers	Linear	247.17 Hours		
Factors 277.92 h						
			0.88934 [SYS 06140	01 .88934200 - Svstem		
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTER	RS KE10H Indust/Site Srvs Steelworkers	Linear	37.71 Hours		
Factors 42.4 h						
			0.88934 [SYS 06140	01 .88934200 - Svstem		
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	16.48 Hours		
Factors 18.53 h						
			0.88934 [SYS 06140	01 .88934200 - Svstem		
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers	Linear	12.36 Hours		
Factors 13.9 h						
			0.88934 [SYS 06140	01 .88934200 - Svstem		
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTER	RS KE10H Indust/Site Srvs Steelworkers	Linear	1.89 Hours		
Factors 2.12 h						
			0.88934 [SYS 06140	01 .88934200 - Svstem		
A5C SUPPLIES	0000 NONE	C210S Facilities Mamt & Maintenance	Linear	2.444.26 Dollars		
Factors 2707.77 d	1.015 FY00 Escalation					
			0.88934 [SYS 061400] .88934200 - System			

Line Item SYS - Contingency And Escalation

BOE

Resources

es		Cost Element	Skill			Department	Curve	<i>Ouantity</i>	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	10.003.84	Dollars
	Factors	10003.8 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	6.600.02	Dollars

Factors 6600.02 Dollars

ACTIVITY ID. 1EFB0043 Description. 111 Cluster Landiold Functions, F10				F102 COSI RISK Z SCHEUME RISK 1								
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost

2 Cabadula Piels

Cost Diele

WBS No: 1EFB02 Proiect Baseline Devl **Rocky Flats Closure Project** Activity ID: 1EFB0045 WBS Filter 1EFB **Baseline Cost and Basis of Estimate** Auginian Til

1	1	1 1	1 ype	nours/Unii	1 otat	101aı ^{Actı}	vity Filter ^	& Escaianon	Cosi Star	ts In FY	ĺ
1	Corrective maintenance	1.00 each	НС	3.940	3.940	84.981	31.304	0	116.285	29.998	146.283
1a	Corrective maintenance	0.79 each	HC	3.826	3.022	65.180	17.379	0	82.558	23.008	105.567
3	Preventive maintenance	1.00 each	HC	664	664	14.553	3.478	0	18.031	5.137	23.168
3a	Preventive maintenance	0.79 each	HC	645	510	11.170	1.931	0	13.101	3.943	17.044
SYS	Contingency And Escalation	1.00 ea	EE	0	0	0	0	43.540	43.540	0	43.540
		Total for Activity 1EFB0	0045:		8.136	175.883	54.092	43.540	273.515	62.087	335.602

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

Approximately 837 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$344.13 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 77% of the FY 99 budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficency return.

The percentage of maintenance effort (labor Type) is as follows:

15.38% Carpenter

32.31% (includes Linemen) Electrician

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Ouantity Units
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	254.35 Hours
Factors 286 h				
			0.88934 [SYS 06140	01 .88934200 - Svstem
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	275.70 Hours
Factors 310 h				
			0.88934 [SYS 06140	01 .88934200 - Svstem
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	169.86 Hours
Factors 191 h				
			0.88934 [SYS 06140	01 .88934200 - Svstem
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	84.49 Hours
Factors 95 h				
			0.88934 [SYS 06140	01 .88934200 - Svstem
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	367.30 Hours
Factors 413 h				
			0.88934 [SYS 06140	01 .88934200 - Svstem
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	351.29 Hours
Factors 395 h				

0.88934 [SYS 061400] .88934200 - System

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Activity Filter

Baseline Devl 1EFB

1EFB0045	Baseline Cost a	and Basis of Estimate	Activity Filter *	Starts In FY *
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworke	rs Linear	409.99 Hours
Factors 461 h				
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Ex	KE10H Indust/Site Save Steelworke		14001 .88934200 - Svstem 28.46 Hours
Factors 32 h	T COTO IIVIAINTENANCE IVIACI IIIVIST (IIICI EX	7 TL TOTT IIII IIII III III III III III III	Lilleai	20.401110413
	T			14001 .88934200 - Svstem
750 STRAIGHT TIME BASE Factors 159 h	C040 MAINTENANCE MACHINIST (incl Ext	b KE10H Indust/Site Srvs Steelworke	rs Linear	141.41 Hours
raciors 139 II			0.88934 [SYS 061	14001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Ext	KE10H Indust/Site Srvs Steelworke		169.86 Hours
Factors 191 h			0.00004 16000 0	14001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworke		169.86 Hours
Factors 191 h				
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworke		14001 .88934200 - Svstem 289.93 Hours
Factors 326 h	CU/U IPAINTERS	KETOH IIIIdusi/Site Sivs Steelworke	rs Linear	269.93Inouis
				14001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworke	rs Linear	91.60 Hours
Factors 103 h			0.88934 ISYS.061	14001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworke		112.95 Hours
Factors 127 h			0.00004 10000.000	44001 00004000 0
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworke	0.88934 ISYS 061	1400] .88934200 - System 584.30 Hours
Factors 657 h	, coo i competto mo i e e e e e	THE TOTAL INTEGRAL OF CITY OF CONTROL	1001	001.00 10410
TEO OTDAIOUT TIME DAGE	OCCO OTRUCTURAL AND METAL WORKS	1/5/01/ 1 1/0// 0 0/ 1 1		1400] .88934200 - System
750 STRAIGHT TIME BASE Factors 281 h	C090 STRUCTURAL AND METAL WORKE	KE10H Indust/Site Srvs Steelworke	rs Linear	249.91 Hours
			0.88934 [SYS 061	1400] .88934200 - System
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworke	rs Linear	13.34 Hours
Factors 15 h			0.88934 1979.061	14001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworke		8.89 Hours
Factors 10 h				
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworke	0.88934 ISYS 061	14001 .88934200 - Svstem 12.45 Hours
Factors 14 h	TOTO TOTAL ENTERS	TILE TOTAL IMPOSSIONE STAND STEELINGTHE	i Lii leat	12.751110013
			0.88934 ISYS 061	14001 .88934200 - Svstem
751 OVERTIME BASE & PRE. Factors 20 h	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworke	rs Linear	17.79 Hours
raciois 20 II			0.88934 [SYS 061	14001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworke	rs Linear	4.45 Hours
Factors 5 h			0.9024 1809	14001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworke	rs Linear	20.45 Hours
Factors 23 h				
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworke		14001 .88934200 - Svstem 18.68 Hours
Factors 21 h	I CUZU IELECTRICIANS	NETURE INGUST/SITE STVS STEETWORKE	rs Linear	18.68IHOURS
·			0.88934 [SYS 061	1400] .88934200 - System

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl 1EFB

	Baseline Cost al	nd Basis of Estimate	Activity Filter *	Starts In FY *
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworker	rs Linear	7.11 Hours
Factors 8 h				
				001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworker	rs Linear	1.78 Hours
Factors 2 h			0.00024 [676.064.44	201 00024200 Cyatam
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Stys Steelworker		001 .88934200 - Svstem 8.89 Hours
Factors 10 h	1 0070 INVALID CONTROL WATCH THE EAD	TRETOTI IIII GGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	Lilloai	0.031110413
1 401075			0.88934 [SYS 06140	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworker	rs Linear	14.23 Hours
Factors 16 h				
				001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworker	rs Linear	8.89 Hours
Factors 10 h			0.00004 10000 00444	201 2000 4000 0 4
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srys Steelworker		001 .88934200 - Svstem 4.45 Hours
Factors 5 h	1 COOU IFLUIVIBERS AND FIFEFITIERS	RETURN IIII III III III III III III III III	S Lilled	4.40III0UIS
1 4010/15			0.88934 [SYS 06140	001 .88934200 - System
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworker		5.34 Hours
Factors 6 h				
				001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworker	rs Linear	29.35 Hours
Factors 33 h				
751 OVERTIME BASE & PRE.	C090 STRUCTURAL AND METAL WORKE	KE4011 Indust/Cits Crus Stanburghon		00] .88934200 - System
751 OVERTIME BASE & PRE. Factors 14 h	1 CU9U ISTRUCTURAL AND METAL WORKE	KETUR IIIIGUSI/SITE SIVS STEELWORKEI	rs Linear	12.45 Hours
ruciois 17 II			0.88934 [SYS 06140	00] .88934200 - System
A5C SUPPLIES	0000 NONE	C210S Facilities Mgmt & Maintenar		31,304.11 Dollars
Factors 1.015 FY00 Escalation	34679 d	·	·	

Line Item 1a - Corrective maintenance

0.88934 [SYS 061400] .88934200 - System

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 395 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$394.56 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 79% of the FY 99 budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficency return.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 32.31% (includes Linemen)

Maint. Mech 13.85% Painter 10.77%

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WBS No: 1EFB02 1EFB0045 Activity ID:

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Activity Filter

Baseline Devl 1EFB

Starts In FY *

Pipefitter 23.08% Metal Worker 4.62% 23.08%

ъ.			
ке	SOL	Jrc	es

Cost Element	Skill	Dangutmant	Cumia	Quantity Uni
750 STRAIGHT TIME BASE	C010 CARPENTERS	ME10H Indust/Site Srvs Steelworkers		267.77 Hours
ctors 301.09 h	1 COTO ICARPENTERS	RETURN IIII III III III III III III III III	Lilledi	201.111nouis
			0.88934 [SYS 061	4001 .88934200 - Svster
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	164.78 Hours
<i>ctors</i> 185.28 h			0.88934 [SVS 061	4001 .88934200 - Svster
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	247.17 Hours
ctors 277.92 h				
	0000 5150500000	1/51011 L 1/01 0 0 1 L		4001 .88934200 - Svster
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	82.39 Hours
octors 92.64 h			0.88934 [SYS 061	4001 .88934200 - Svster
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	398.17 Hours
actors 447.71 h				
			0.88934 [SYS 061	4001 .88934200 - Svster
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	340.98 Hours
<i>actors</i> 383.41 h			0.00004 10000.004	4001 0000 4000 0 4
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	0.88934 ISYS 061 Linear	4001 .88934200 - Svster 357.02 Hours
actors 401.44 h	1 CO20 IELECTRICIANS	RETURN IIII III III III III III III III III	Lilleal	337.02IFIOUIS
101.44			0.88934 [SYS 061	4001 .88934200 - Svster
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear	27.46 Hours
actors 30.88 h				
		T		4001 .88934200 - Svster
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear	137.31 Hours
actors 154.4 h			0.88034 [676.061	4001 .88934200 - Svster
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srys Steelworkers	Linear	164.78 Hours
actors 185.28 h		THE TOTAL MINIMOVE SITE STOCKED		
			0.88934 [SYS 061	4001 .88934200 - Svster
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	281.48 Hours
actors 316.5 h				
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 ISYS 061 Linear	4001 .88934200 - Svsten 164.78 Hours
actors 185.28 h	I CO/O IPAINTERS	KETOH IIIIdus//Site Sivs Steelworkers	Linear	104./ oinouis
100.20			0.88934 [SYS 061	4001 .88934200 - Systen
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	109.85 Hours
actors 123.52 h				
		T		4001 .88934200 - Svster
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	89.23 Hours
actors 100.33 h			0.00004 TOVO 064	4001 .88934200 - Svsten
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 15 15 06 1 Linear	567.65 Hours
actors 638.28 h	1 COSS COMPENSO / NO CI	TAL TOTAL INTRODUCTION OF TO SECUNDATE OF	Linear	, 007.00 louis
			0.88934 [SYS 061	4001 .88934200 - Svster
750 STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL WORKE	KE10H Indust/Site Srvs Steelworkers	Linear	242.59 Hours
<i>actors</i> 272.77 h				

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl 1EFB

121 200 10	Baseline Co	ost and Basis of Estimate Activity Fig.	ter * Starts In FY *
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 12.36 Hour
Factors 13.9 h			
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400] .88934200 - Svste Linear 13.38 Hour
751 OVERTIME BASE & PRE. Factors 15.05 h	I CU10 ICARPENTERS	KETUH lindust/Site Srvs Steelworkers	Linear 13.38iHour
10.00			0.88934 [SYS 061400] .88934200 - Syste
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 8.24 Hour
Factors 9.26 h			
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	0.88934
Factors 4.63 h	1 CO20 IELECTRICIANS	RETURN IIII III III III III III III III III	Lilleal 4.12Inoul
			0.88934 [SYS 061400] .88934200 - Syste
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 17.05 Hour
Factors 19.17 h			
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400] .88934200 - Svste Linear 17.85 Hour
Factors 20.07 h	1 CO20 IELECTRICIANS	RETURN IIII III III III III III III III III	Lilleal 17.63iFloui
			0.88934 [SYS 061400] .88934200 - Syste
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 19.91 Hour
Factors 22.39 h			
751 OVERTIME BASE & PRE.	CO40 MAINTENANCE MACHINIST (inc	ELEXP KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400] .88934200 - Syste Linear 8.24 Hour
Factors 9.26 h	1 COTO IMAINTENANCE MACHINIST (IIIC	EXP INC 1011 IIIdust/Oile 01V3 Steetworkers	Linear 0.24) Iour
			0.88934 [SYS 061400] .88934200 - Syste
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (inc	ELEXP KE10H Indust/Site Srvs Steelworkers	Linear 1.37 Hour
Factors 1.54 h			0.00004 [0]/0.004400] 00004000 0
751 OVERTIME BASE & PRE.	CO40 MAINTENANCE MACHINIST (inc	Exp KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400] .88934200 - Syste Linear 6.87 Hour
Factors 7.72 h	1 3070 JUN MINTENAMOE WINO MINTENAMO	HEAD NETOTI IIIIdds/Jolle 01/3 Oleciwomers	Elitedi 0.07 ji lodi
			0.88934 [SYS 061400] .88934200 - Syste
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear 8.24 Hour
Factors 9.26 h			0.88934 [SYS 061400] .88934200 - Syste
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear 14.07 Hour
Factors 15.82 h		THE TOTAL MINISTER STATE OF ST	
			0.88934 [SYS 061400] .88934200 - Syste
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear 4.46 Hour
Factors 5.02 h			0.88934 [SYS 061400] .88934200 - Svste
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear 5.50 Hour
Factors 6.18 h		THE TOTAL MINISTER STATE OF THE	
			0.88934 [SYS 061400] .88934200 - Syste
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear 28.38lHour
Factors 31.91 h			0.88934 [SYS 061400] .88934200 - Syste
751 OVERTIME BASE & PRE.	C090 STRUCTURAL AND METAL WO	RKE KE10H Indust/Site Srvs Steelworkers	Linear 12.13 Hour
Factors 13.64 h	The state of the s	The same state of the same sta	12.13013331
			0.88934 [SYS 061400] .88934200 - Syste
A5C SUPPLIES	0000 NONE	C210S Facilities Momt & Maintenance	Linear 21.998.33 Dolla
Factors 24370 d	1.015 FY00 Escalation		0.00024 [6V6.064.000] 0.0024200 0.004
una vambi va madimba mana			0.88934 [SYS 061400] .88934200 - Syste

Line Item 3 - Preventive maintenance

BOE Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to

WBS No: 1EFB02 Rocky Flats Closure Project Activity ID: 1EFB0045 Baseline Cost and Basis of Estimate

Proiect Baseline Devl

WBS Filter 1EFB

Activity Filter * Starts In FY *

Curve

0.88934 [SYS 061400] .88934200 - System

Units

corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS. Approximately 335 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$139.79 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 77% of the FY 99 budget per FCP 1999-8064

Department

Basis for adjustment - FCP 1999-8064 funding efficency return.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Cost Element

Maint. Mech 37.50% Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	339.73 Hours
Factors 382 h				
			0.88934 [SYS 0614	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl E	xp KE10H Indust/Site Srvs Steelworkers	Linear	254.35 Hours
Factors 286 h				
			0.88934 [SYS 0614	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	39.13 Hours
Factors 44 h				
			0.88934 [SYS 0614	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	16.90 Hours
Factors 19 h				
			0.88934 [SYS 0614	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl E	XD KE10H Indust/Site Srvs Steelworkers	Linear	12.45 Hours
Factors 14 h				
			0.88934 [SYS 0614	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	1.78 Hours
Factors 2 h				
			0.88934 [SYS 0614	001 .88934200 - Svstem
A5C SUPPLIES	0000 NONE	C210S Facilities Momt & Maintenance	Linear	3.478.03 Dollars
Factors 3853 d	1.015 FY00 Escalation			

Line Item 3a - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

Approximately 125 preventative maintenance work actions are expected.

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WBS No: 1EFB02 1EFB0045 Activity ID:

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Activity Filter Baseline Devl 1EFB

Starts In FY *

0.88934 [SYS 061400] .88934200 - System

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$202.17 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 79% of the FY 99 budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficency return.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50% Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

s_		Cost Element		Skill		Department	Curve	Ouantity	Units
	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	329.55	Hours
Fa	actors	370.56 h							
							0.88934 [SYS 06140	01 .88934200 - 3	Svstem
	750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	247.17	Hours
Fa	actors	277.92 h							
_				_			0.88934 [SYS 06140	01 .88934200 - 3	Svstem
	750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	37.71	Hours
Fa	actors	42.4 h							
_				_			0.88934 [SYS 06140	01 .88934200 - 3	Svstem
	751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	16.48	Hours
Fa	actors	18.53 h							
		T		1			0.88934 [SYS 06140	01 .88934200 - \$	Svstem
	751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	12.36	Hours
Fa	actors	13.9 h							
				1			0.88934 [SYS 06140	0] .88934200 - 3	System
	751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.89	Hours
Fa	actors	2.12 h							
		T		1			0.88934 [SYS 06140	0] .88934200 - 3	System
	A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	2,444.26	Dollars
Fa	actors	2707.77 d		1.015 FY00 Escalation					

Line Item SYS - Contingency And Escalation

BOE

Resources

es		Cost Element	Skill			Department	Curve	<i>Ouantity</i>	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	29.891.63	Dollars
_	Factors	29891.6 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	13.648.47	Dollars

Factors 13648.5 Dollars

Activity ID: 1EFB0050 Description: 111 Cluster Landlord Functions, FY03

Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours		Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
1	Corrective maintenance	1.00	each	HC	3.940	3.940	84.981	31.304	0	116.285	29.403	145.688
1a	Corrective maintenance	0.79	each	HC	3.826	3.022	65.180	17.379	0	82.558	22.552	105.111
3	Preventive maintenance	1.00	each	HC	664	664	14.553	3.478	0	18.031	5.035	23.067
3a	Preventive maintenance	0.79	each	HC	645	510	11.170	1.931	0	13.101	3.865	16.965

2 Schedule Risk

Cost Risk

Rockv Flats Closure Project

Baseline Cost and Basis of Estimate

Project

WBS Filter

1EFB

**

						Activity	rmer			S III I' I	
SYS	Contingency And Escalation	1.00 ea	l EE	0	0	0	0	80.430	80.430	0	80.430
	Total for Activity 1EFB0050:				8.136	175.883	54.092	80.430	310.405	60.856	371.261

Line Item 1 - Corrective maintenance

1EFB02

1EFB0050

BOE

WBS No:

Activity ID:

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

Approximately 837 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$344.13 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 77% of the FY 99 budget per FCP 1999-8064

budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficency return.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 32.31% (includes Linemen)

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Ouantity Units
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	254.35 Hours
Factors 286 h				
			0.88934 [SYS 0614	4001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	275.70 Hours
Factors 310 h				
			0.88934 [SYS 0614	4001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	169.86 Hours
Factors 191 h				
			0.88934 ISYS 0614	4001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	84.49 Hours
Factors 95 h				
			0.88934 [SYS 0614	4001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	367.30 Hours
Factors 413 h				
			0.88934 [SYS 0614	4001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	409.99 Hours
Factors 461 h				
			0.88934 [SYS 0614	4001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	351.29 Hours
Factors 395 h				
, · · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·		0.88934 [SYS 0614	4001 .88934200 - Svstem

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Courte In EV *

 WBS No:
 1EFB02

 Activity ID:
 1EFB0050

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filt

Baseline Devl 1EFB

	Baseline Cost ar	10 Basis of Estimate Activity Filte	r * Starts In FY *
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp		Linear 28.46 Hours
Factors 32 h			
	T L		0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear 141.41 Hours
Factors 159 h			0.00024 [CVC.004400] 0.0024200 Cvctom
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Style Steelworkers	0.88934 [SYS 061400] .88934200 - System Linear 169.86 Hours
Factors 191 h	T CO-TO IIVIAII TENANCE WACHING THE EXP	TETOT IIIIdusi/Site Sivs Steelworkers	Lineal 103.00ii louis
101			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear 289.93 Hours
Factors 326 h			
			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear 169.86 Hours
Factors 191 h			0.88934 ISYS 0614001 .88934200 - System
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	U.86934 ISTS 0614001.88934200 - System Linear 91.60 Hours
Factors 103 h	T COOK IN LOWIDLING AND THE LITTLENG	TETOT IIIIdusi/Site Sivs Steelworkers	Lineal 31.00ii louis
			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear 584.30 Hours
Factors 657 h			
		I	0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear 112.95 Hours
Factors 127 h			0.99034 [SVS.061400] 99034300 System
750 STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL WORKE	KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400] .88934200 - System Linear 249.91 Hours
Factors 281 h	7 COSO TOTALOGICAL METAL WORKE	TRETOTT IIIIdddy Olic Oliva Oleciwolicia	Elitodi 249.51 Iodio
			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 13.34 Hours
Factors 15 h			
			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 8.89lHours
Factors 10 h			0.00024 [CVC.064.400] 0.002.4200 Cycatam
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400] .88934200 - Svstem Linear 12.45 Hours
Factors 14 h	1 OUTO TOAM ENTERS	TALIOTI IIIIQUSUORE OIVS OLEEIWOIKEIS	Lineai 12.45ii louis
			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KD10H 776 Complex Steelworkers	Linear 4.45 Hours
Factors 5 h			
			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 20.45 Hours
Factors 23 h			0.88934 ISYS 0614001 .88934200 - System
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	U.88934 1515 0614001.88934200 - System Linear 18.68 Hours
Factors 21 h	TOTAL IEEEO HAOMAGO	TETOTI IIII MODUOTICO OTVO OTCOMOTICIO	Linear Totodi Idais
			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 17.79 Hours
Factors 20 h			
			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KD10H 776 Complex Steelworkers	Linear 1.78 Hours
Factors 2 h			0.88034 [CVC.0644001_00034300_Cv-stare
			0.88934 [SYS 061400] .88934200 - System

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl 1EFB

12. 20000	Baseline Cost a	nd Basis of Estimate	Activity Filter *	Starts In FY *
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exc	KE10H Indust/Site Srvs Steelworke		7.11 Hours
Factors 8 h				
				001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworke	ers Linear	8.89 Hours
Factors 10 h				
		T.,		001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworke	ers Linear	14.23 Hours
Factors 16 h			0.00004 [0.000.004	1001 0000 1000 0
751 OVERTIME BASE & PRE.	C070 PAINTERS	IVEAUL III durat/Oita Como Ota abusarla		001 .88934200 - Svstem
	I CU/U IPAINTERS	KE10H Indust/Site Srvs Steelworke	ers Linear	8.89lHours
Factors 10 h			0.88934 ISVS 0614	1001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworke		4.45 Hours
Factors 5 h				11 1011 10410
			0.88934 [SYS 0614	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworke	ers Linear	5.34 Hours
Factors 6 h				
			0.88934 [SYS 0614	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworke	ers Linear	29.35 Hours
Factors 33 h				
				001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C090 STRUCTURAL AND METAL WORKE	KE10H Indust/Site Srvs Steelworke	ers Linear	12.45 Hours
Factors 14 h				
		T I=		00] .88934200 - System
A5C SUPPLIES	0000 NONE	C210S Facilities Mgmt & Maintena	nce Linear	31,304.11 Dollars
Factors 34679 d	1.015 FY00 Escalation		0.00004 10040 0044	
			0.88934 [SYS 0614	100] .88934200 - System

Line Item 1a - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 395 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$394.56 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 79% of the FY 99 budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficency return.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 32.31% (includes Linemen)

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08%

Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

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Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Ba
WBS Filter 1E
Activity Filter *

Baseline Devl ilter 1EFB

1EFB0050	Baseline	Cost and Basis of Estimate	WBS Filter 1EFB Activity Filter *	Starts In FY *
S Cost Element	Skill	Department	Curve	Ouantity Units
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelwork	kers Linear	267.77 Hours
Factors 301.09 h				
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelwork		0614001 .88934200 - Svstem 164.78 Hours
Factors 185.28 h	1 COTO ICARPENTERS	RETURN IIII III III III SIVS SIEEIWOIK	ers Linear	184.781Flouis
14073 100.20 11			0.88934 [SYS	0614001 .88934200 - System
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelwork		247.17 Hours
Factors 277.92 h				
				0614001 .88934200 - Svstem
750 STRAIGHT TIME BASE Factors 447.71 h	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwork	kers Linear	398.17 Hours
Factors 447.71 h			0.88934 ISVS	061400] .88934200 - System
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwork		340.98 Hours
Factors 383.41 h				
				0614001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwork	kers Linear	357.02 Hours
Factors 401.44 h			0.0004 10.000	004 4001 0000 4000 - 0:
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwork		0614001 .88934200 - System 82.39 Hours
Factors 92.64 h	1 COZO IELECTRICIANO	TALTOTT IIII GUSVOILE SIVS SLEEWOIK	CI3 LINEAL	02.53110013
02.0			0.88934 ISYS	0614001 .88934200 - System
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST	(incl Exp KE10H Indust/Site Srvs Steelwork	kers Linear	137.31 Hours
Factors 154.4 h				
750 CTDAIGHT TIME DAGE	COAC MAINTENANCE MACHINICT	(in al. Form I/F4011 Indust/Cita Court Ctanhorada		061400] .88934200 - System
750 STRAIGHT TIME BASE Factors 185.28 h	C040 IMAINTENANCE MACHINIST	(incl Exp KE10H Indust/Site Srvs Steelwork	kers Linear	164.78 Hours
Tuctors 100.20 11			0.88934 [SYS	061400] .88934200 - System
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST	(incl Exp KE10H Indust/Site Srvs Steelwork	kers Linear	27.46 Hours
Factors 30.88 h				
				0614001 .88934200 - System
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelwork	kers Linear	281.48 Hours
Factors 316.5 h			2721 15088 0	0614001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelwork		164.78 Hours
Factors 185.28 h				
				0614001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTER	RS KE10H Indust/Site Srvs Steelwork	kers Linear	109.85 Hours
Factors 123.52 h			0.000.4 100.00	004 4001 0000 4000
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTE	RS KE10H Indust/Site Srvs Steelwork		0614001 .88934200 - System 89.23 Hours
Factors 100.33 h	T COOK IN ECHNOLING AND THE ETHTE	NO TRETOTT IIII QUISVOILE SIVI SILEEIWOIR	CI3 LINEAL	03.231110013
			0.88934 ISYS	0614001 .88934200 - System
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTE	RS KE10H Indust/Site Srvs Steelwork	kers Linear	567.65 Hours
Factors 638.28 h				
750 OTDAIOUT TIME DAGE	OCCO OTPLICTURAL AND METALL	MODIVE METALL LA MON O ON LA LA		0614001 .88934200 - System
750 STRAIGHT TIME BASE Factors 272.77 h	C090_ISTRUCTURAL AND METAL V	VORKE KE10H Indust/Site Srvs Steelwork	kers Linear	242.59 Hours
1 4010/13 212.11 11			0.88934 ISVS	0614001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelwork		12.36 Hours
Factors 13.9 h				
			0.88934 [SYS	061400] .88934200 - System

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Baseline Devl WBS Filter 1EFB Activity Filter *

Starts In FY * 751 OVERTIME BASE & PRE. C010 CARPENTERS KE10H Indust/Site Srvs Steelworkers 13.38 Hours Linear Factors 15.05 h 0.88934 [SYS 061400] .88934200 - System 751 OVERTIME BASE & PRE C010 CARPENTERS KE10H Indust/Site Srvs Steelworkers 8.24 Hours Linear 9.26 Factors h 0.88934 [SYS 061400] .88934200 - System C020 ELECTRICIANS 751 OVERTIME BASE & PRE KE10H Indust/Site Srvs Steelworkers 17.05 Hours Linear 19.17 h Factors 0.88934 [SYS 061400] .88934200 - System KE10H Indust/Site Srvs Steelworkers OVERTIME BASE & PRE C020 ELECTRICIANS Linear 17.85 Hours 20.07 h Factors 0.88934 [SYS 061400] .88934200 - System 751 OVERTIME BASE & PRE C020 ELECTRICIANS 19.91 Hours KE10H Indust/Site Srvs Steelworkers Linear Factors 22.39 h 0.88934 [SYS 061400] .88934200 - System 751 OVERTIME BASE & PRE C020 ELECTRICIANS KE10H Indust/Site Srvs Steelworkers 4.12 Hours Linear Factors 4.63 h 0.88934 [SYS 061400] .88934200 - System C040 MAINTENANCE MACHINIST (incl Exp | KE10H | Indust/Site Srvs Steelworkers 751 OVERTIME BASE & PRE. Linear 8.24 Hours Factors 9.26 h 0.88934 [SYS 061400] .88934200 - System C040 MAINTENANCE MACHINIST (incl Exp | KE10H | Indust/Site Srvs Steelworkers OVERTIME BASE & PRE Linear 1.37 Hours Factors 1.54 h 0.88934 [SYS 061400] .88934200 - System C040 MAINTENANCE MACHINIST (incl Exp | KE10H | Indust/Site Srvs Steelworkers 751 OVERTIME BASE & PRE Linear 6 87 Hours 7.72 h Factors 0.88934 [SYS 061400] .88934200 - System 751 OVERTIME BASE & PRE. C070 PAINTERS KE10H Indust/Site Srvs Steelworkers 8.24 Hours Linear 9.26 h Factors 0.88934 [SYS 061400] .88934200 - System C070 PAINTERS KE10H Indust/Site Srvs Steelworkers 14.07 Hours 751 OVERTIME BASE & PRE Linear Factors 15.82 h 0.88934 [SYS 061400] .88934200 - System 5.50 Hours C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers OVERTIME BASE & PRE Linear Factors 6.18 h 0.88934 [SYS 061400] .88934200 - System C080 PLUMBERS AND PIPEFITTERS 751 OVERTIME BASE & PRE. KE10H Indust/Site Srvs Steelworkers 4.46 Hours Linear 5.02 h Factors 0.88934 [SYS 061400] .88934200 - System 28.38 Hours 751 OVERTIME BASE & PRE C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers Linear 31.91 h Factors 0.88934 [SYS 061400] .88934200 - System 751 OVERTIME BASE & PRE C090 STRUCTURAL AND METAL WORKE | KE10H | Indust/Site Srvs Steelworkers 12.13 Hours Linear 13.64 h Factors 0.88934 [SYS 061400] .88934200 - System C210S Facilities Momt & Maintenance 21 998 33 Dollars A5C SUPPLIES 0000 NONE Linear Factors 1.015 -- FY00 Escalation --24370 d

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site

maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster

0.88934 [SYS 061400] .88934200 - System

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Baseline Devl WBS Filter Activity Filter

1EFB

Starts In FY

in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS. Approximately 335 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$139.79 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 77% of the FY 99 budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficency return.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50% Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

s		C	ost Element		Skill		Department	Curve	Ouantity Units
	750	STRAIGH	TTIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	339.73 Hours
Fa	ctors	382	h						
_								0.88934 [SYS 061400	1 .88934200 - Svstem
	750	STRAIGH	TTIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	254.35 Hours
Fa	ctors	286	h						
								0.88934 [SYS 061400	1 .88934200 - Svstem
	750	STRAIGH	TTIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	39.13 Hours
Fa	ctors	44	h						
					,			0.88934 [SYS 061400	1 .88934200 - Svstem
	751	OVERTIM	E BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	16.90 Hours
Fa	ctors	19	h						
								0.88934 [SYS 061400	1 .88934200 - Svstem
	751	OVERTIM	E BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	12.45 Hours
Fa	ctors	14	h						
					,			0.88934 [SYS 061400	1 .88934200 - Svstem
	751	OVERTIM	E BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.78 Hours
Fa	ctors	2	h						
					,			0.88934 [SYS 061400	1 .88934200 - Svstem
	A5C	SUPPLIES	3	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	3.478.03 Dollars
Fa	ctors	3853	d		1.015 FY00 Escalation				

Line Item 3a - Preventive maintenance

0.88934 [SYS 061400] .88934200 - System

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site

maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 125 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

6/23/00 11:24:11 AM Page 49 of 388 OFFICIAL USE ONLY

Proiect **Rocky Flats Closure Project Baseline Cost and Basis of Estimate**

Baseline Devl WBS Filter 1EFB Activity Filter

Starts In FY

0.88934 [SYS 061400] .88934200 - System

Item - Preventive maintenance

Units - Work Packages

1EFB02

1EFB0050

Unit Cost - \$202.17 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 79% of the FY 99

budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficency return.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50% Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

WBS No:

Activity ID:

es		Cost Element		Skill		<u>Department</u>	Curve	Quantity	Units
7	'50	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	329.55	Hours
Fac	ctors	370.56 h							
							0.88934 [SYS 06140	01 .88934200 - 3	Svstem
7	'50	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	247.17	Hours
Fac	ctors	277.92 h							
							0.88934 [SYS 06140	01 .88934200 - 3	Svstem
_ 7	'50	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	37.71	Hours
Fac	ctors	42.4 h							
		·		1			0.88934 [SYS 06140	01 .88934200 - 3	System
7	'51	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	16.48	Hours
Fac	ctors	18.53 h							
		1		1			0.88934 [SYS 06140		
7	'51	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	12.36	Hours
Fac	ctors	13.9 h							
_		1		1			0.88934 [SYS 06140	01 .88934200 - 3	
7	'51	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.89	Hours
Fac	ctors	2.12 h							
		1		1			0.88934 [SYS 06140	01 .88934200 - 3	Svstem
A	5C	SUPPLIES	0000	NONE	C210S	Facilities Momt & Maintenance	Linear	2.444.26	Dollars
Fac	ctors	2707.77 d		1.015 FY00 Escalation					

Line Item SYS - Contingency And Escalation

BOE

Resources

es		Cost Element		Skill		Department	Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	58.127.68	Dollars
	Factors	58127.7 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	22.302.43	Dollars

Factors 22302.4 Dollars

WBS No: 1EFB0	331 Cluster Landlord											
Activity ID: 1EFB0075 Description: 331 Cluster Landlord Functions, FY00 Cost Risk 2 Schedule Risk 1									risk 1			
Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	1 Corrective maintenance		each	HC	1.470	1.191	25.651	7.488		33.139	12.518	45.656
3 Preventive maintenance		0.81	each	HC	249	202	4.426	832	0	5.258	2.160	7.418
	Tot	al for Activi	ty 1FFB0075	5.		1 392	30.077	8 320	0	38 397	14 678	53 075

Line Item 1 - Corrective maintenance

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance,

> 6/23/00 11:24:11 AM Page 50 of 388 OFFICIAL USE ONLY

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Baseline Devl Proiect WBS Filter 1EFB Activity Filter

Starts In FY

backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 214 corrective/routine maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

1EFB03

1EFB0075

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$543.48 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 81% of the FY 99

budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficency return.

The percentage of maintenance effort (labor Type) is as follows:

15.38% Carpenter

Electrician 32.31% (includes Linemen)

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

WBS No:

Activity ID:

es	Cost Element	Skill	Department	Curve	Ouantity Units
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	112.52 Hours
Factor	s 224.69 h	0.3612 May 2000 Earned Val	lue Factor		
				1.38645 [SYS 0613	3001 1.386448 - Target
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	103.86 Hours
Factor	s 207.4 h	0.3612 May 2000 Earned Val	lue Factor		
					3001 1.386448 - Target
750		C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	69.24lHours
Factor	s 138.27 h	0.3612 May 2000 Earned Val	lue Factor		
	1				3001 1.386448 - Target
750		C020 IELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	150.03 Hours
Factor	s 299.58 h	0.3612 May 2000 Earned Val	lue Factor		
					3001 1.386448 - Target
750		C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	34.62 Hours
Factor	s 69.13 h	0.3612 May 2000 Earned Val	lue Factor		
	070 410417 71415 0405	0000 5150501010	1/5/01/11/19/19 0 0/11/1		3001 1.386448 - Target
750		C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	167.31 Hours
Factor	s 334.1 h	0.3612 May 2000 Earned Val	lue Factor	4 000 45 10 1/0 00 46	2001 4 000 440 T
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers		3001 1.386448 - Target
750		0.3612 May 2000 Earned Val		Linear	143.28lHours
Factor	s 286.12 h	0.3612 May 2000 Earned Val	iue Factor	1 2964E ISVS 0613	3001 1.386448 - Target
750	STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (inc	cl Exp KE10H Indust/Site Srys Steelworkers	Linear	11.54 Hours
Factor		0.3612 May 2000 Earned Val		Lilleal	11.54IHOUIS
rucior	5 20.04 II	0.3012 Iviay 2000 Editled Val	iue i acioi	1 38645 [575 0613	3001 1.386448 - Target
750	STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (inc	cl Exp KE10H Indust/Site Srvs Steelworkers	1.36043 1313 0013 Linear	69.24 Hours
Factor		0.3612 May 2000 Earned Val		Linear	35.24[10013
1 40.07		0.0012 May 2000 Edified Val		1.38645 [SYS 0613	300] 1.386448 - Target

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 WBS No:
 1EFB03

 Activity ID:
 1EFB0075

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Baseline Devl
WBS Filter 1EFB
Activity Filter *

	Baseline Cost and Basis of Estimate	Activity Filter * Starts In FY *
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steel	
Factors 115.22 h	0.3612 May 2000 Earned Value Factor	
		1.38645 ISYS 0613001 1.386448 - Target
750 STRAIGHT TIME BASE	C070 PAINTERS KE10H Indust/Site Srvs Steel	workers Linear 69.24 Hours
Factors 138.27 h	0.3612 May 2000 Earned Value Factor	
		1.38645 ISYS 0613001 1.386448 - Target
750 STRAIGHT TIME BASE	C070 PAINTERS KE10H Indust/Site Srvs Steel	workers Linear 118.28 Hours
Factors 236.18 h	0.3612 May 2000 Earned Value Factor	
		1.38645 [SYS 061300] 1.386448 - Target
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steel	workers Linear 37.49Hours
Factors 74.87 h	0.3612 May 2000 Earned Value Factor	4 000 45
750 OTDAIOUT TIME DAGE	OCCO DILIMPEDO AND DIDEFITTEDO METADA LA 1/0% OCCUPA	1.38645 [SYS 061300] 1.386448 - Target
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steel	workers Linear 100.82 Hours
Factors 201.32 h	0.3612 May 2000 Earned Value Factor	4 20045 ISVS 0642001 4 200440 Torrest
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steel	1.38645 SYS 0613001 1.386448 - Target workers
Factors 92.18 h	0.3612 May 2000 Earned Value Factor	workers Linear 46.16inours
Factors 92.18 II	0.3612 May 2000 Earned Value Factor	1.38645 [SYS 061300] 1.386448 - Target
750 STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL WORKE KE10H Indust/Site Srvs Steel	
Factors 203.55 h	0.3612 May 2000 Earned Value Factor	WOIKEIS Lineal 101.93inouis
<i>Tuctors</i> 203:33 II	0.3012 Iviay 2000 Lamed Value I actor	1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C010 CARPENTERS KE10H Indust/Site Srvs Steel	
Factors 10.37 h	0.3612 May 2000 Earned Value Factor	TOTAL C. TOTALOGIC
10.07	0.0012 May 2000 Earnou Value Factor	1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C010 CARPENTERS KE10H Indust/Site Srvs Steel	workers Linear 3.46 Hours
Factors 6.91 h	0.3612 May 2000 Earned Value Factor	
	.,	1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C010 CARPENTERS KE10H Indust/Site Srvs Steel	workers Linear 5.62 Hours
Factors 11.23 h	0.3612 May 2000 Earned Value Factor	
		1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS KE10H Indust/Site Srvs Steel	workers Linear 8.37 Hours
Factors 16.71 h	0.3612 May 2000 Earned Value Factor	
		1.38645 ISYS 0613001 1.386448 - Target
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS KE10H Indust/Site Srvs Steel	workers Linear 7.50 Hours
Factors 14.98 h	0.3612 May 2000 Earned Value Factor	
		1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS KE10H Indust/Site Srvs Steel	workers Linear 7.17 Hours
Factors 14.31 h	0.3612 May 2000 Earned Value Factor	
		1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS KE10H Indust/Site Srvs Steel	workers Linear 1.73 Hours
Factors 3.46 h	0.3612 May 2000 Earned Value Factor	4 0004F F0VO 00400014 000440 T
754 OVEDTIME DAGE 9 DD5	COMO MAINTENIANIOE MACCHINICT (in al Firm MEACH III II 1/2); Co. Co.	1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steel	workers Linear 2.88 Hours
Factors 5.76 h	0.3612 May 2000 Earned Value Factor	4 2004E ISVC 0642001 4 200440 T
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steel	1.38645 [SYS 061300] 1.386448 - Target workers Linear 0.58 Hours
Factors 1.15 h	0.3612 May 2000 Earned Value Factor	wulkers Linear U.58IHours
raciois 1.10 II	0.3012 IWAY 2000 Earned Value Factor	1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steel	
Factors 6.91 h	0.3612 May 2000 Earned Value Factor	WOINCIS LINEAN 3.40170015
1 40.073 0.31 11	U.JUTZ INIAY ZUUU LAITIEU VAIUE I AUIUI	1.38645 [SYS 061300] 1.386448 - Target
		1.000-0 010 001000 1.000+10 - Talget

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WBS No: 1EFB03 Activity ID:

1EFB0075

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl 1EFB

	Daseille Co	Activity	Filter *	Starts In FY *
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	3.46 Hours
Factors 6.91 h	0.3612 May 2000 Earned Value	ue Factor		
			1.38645 [SYS 06130	01 1.386448 - Target
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	5.91 Hours
Factors 11.81 h	0.3612 May 2000 Earned Value	ue Factor		
			1.38645 [SYS 06130	01 1.386448 - Target
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	1.87 Hours
Factors 3.74 h	0.3612 May 2000 Earned Value	ue Factor		
			1.38645 [SYS 06130	01 1.386448 - Target
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	2.31 Hours
Factors 4.61 h	0.3612 May 2000 Earned Value	ue Factor		
			1.38645 ISYS 06130	01 1.386448 - Target
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	11.93 Hours
Factors 23.82 h	0.3612 May 2000 Earned Value	ue Factor		
			1.38645 ISYS 06130	01 1.386448 - Target
751 OVERTIME BASE & PRE.	C090 ISTRUCTURAL AND METAL WO	RKE KE10H Indust/Site Srvs Steelworkers	Linear	5.10 Hours
Factors 10.18 h	0.3612 May 2000 Earned Value	ue Factor		
			1.38645 ISYS 06130	
A5C SUPPLIES	l 0000 INONE	C210S Facilities Momt & Maintenance	Linear	9.243.93 Dollars
Factors 1.015 FY00 Escalation	18186.1 d	0.3612 May 2000 Earned Value Fa		
			1.38645 [SYS 06130	0] 1.386448 - Target

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 230 preventative maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$82.22 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 81% of the FY 99

budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficency return.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50% Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es		Cost Element		Skill		Department	Curve	Quantity	Units
	'50 S	STRAIGHT TIME BASE	C020 ELECTRIC	CIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	116.45	Hours
Fac	ctors	232.53 h	0.3612	May 2000 Earned Value Fac	tor				
							1.38645 [SYS 0613	3001 1.386448 - T	arget

Rocky Flats Closure Project

Proiect WBS Filter Baseline Devl 1EFB

121 20073	Baseline	e Cost and Basis of Estimate	Activity Filter *	Starts In FY *
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST	(incl Exp KE10H Indust/Site Srvs Steelwo		103.86 Hours
Factors 207.4 h	0.3612 May 2000 Earned	l Value Factor		
			1.38645 [SYS 061	3001 1.386448 - Target
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTE	ERS KE10H Indust/Site Srvs Steelwo	orkers Linear	15.84 Hours
Factors 31.64 h	0.3612 May 2000 Earned	l Value Factor		
			1.38645 [SYS 061	3001 1.386448 - Target
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwo	orkers Linear	6.93 Hours
Factors 13.83 h	0.3612 May 2000 Earned	l Value Factor		
			1.38645 [SYS 061	3001 1.386448 - Target
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST	(incl Exp KE10H Indust/Site Srvs Steelwo	rkers Linear	5.19 Hours
Factors 10.37 h	0.3612 May 2000 Earned	l Value Factor		
			1.38645 [SYS 061	3001 1.386448 - Target
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTE	ERS KE10H Indust/Site Srvs Steelwo	rkers Linear	0.79 Hours
Factors 1.58 h	0.3612 May 2000 Earned	l Value Factor		
			1.38645 [SYS 061	3001 1.386448 - Target
A5C SUPPLIES	0000 NONE	C210S Facilities Mamt & Mainte	enance Linear	1.027.11 Dollars

Factors 2020.68 d 1.015 -- FY00 Escalation --0.3612 May 2000 Earned Value Factor

Total for Activity 1EFB0080:

1.38645 [SYS 061300] 1.386448 - Target

78.539

27.866

106,405

Activity ID: 1EFB0080 Description: 331 Cluster Landlord Functions, FY01 Cost Risk 2 Schedule Risk Line Item Description Quantity Units BOELabor Labor Hours Labor Cost Materials/Sub Contingency Total Prime Burden Cost Total Cost Hours/Unit & Escalation Type Total **Total** Cost Cost HC Corrective maintenance 0.81 each 2,855 2,312 49,872 13,297 0 63,169 23,789 86,958 0.81 each HC 481 390 8.546 1.477 0 10.024 4.077 14.100 Preventive maintenance Contingency And Escalation SYS 1.00 ea FF 0 0 0 0 5,346 5,346 0 5,346

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

2.702

58.419

14,775

5.346

·Approximately 214 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$543.48 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 81% of the FY 99

budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficency return.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 32.31% (includes Linemen)

Maint. Mech 13.85% Painter 10 77% Pipefitter 23.08%

Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill		Curve	Ouantity	Units	
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Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Activity Filter

Baseline Devl 1EFB

1EFB0080	Baseline Cost	and Basis of Estimate	WBS Filter 1EFB Activity Filter *	Starts In FY *
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelwor		122.97 Hours
Factors 138.27 h				
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelwor		4001 .88934200 - Svsten 199.83 Hours
750 STRAIGHT TIME BASE Factors 224.69 h	I COTO ICARPENTERS	RETUR lindust/Site Srvs Steelwor	rkers Linear	199.83IHOUIS
aciors 224.00 II			0.88934 [SYS 061	4001 .88934200 - Svsten
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelwor	kers Linear	184.45 Hours
Factors 207.4 h				
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwor		4001 .88934200 - Svsten 297.13 Hours
Factors 334.1 h	T COZO IEEEC INICIANS	TETOTT IIIIdus/Site Sivs Steetwor	NEIS LIHEAI	297.131110013
			0.88934 ISYS 061	4001 .88934200 - Svsten
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwor	kers Linear	254.46 Hours
Factors 286.12 h			0.00004 10000.004	4001 00004000 0
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwor		4001 .88934200 - Svstem 266.43 Hours
Factors 299.58 h	1 0020 ILLEGITATION ATO	- INC TOTA IIII GGSVOIC OTVS OCCIWOT		200.401110013
				4001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwor	kers Linear	61.48 Hours
Factors 69.13 h			0.00024 ISVC.064	4001 00024200 Cycton
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Ex	xp KF10H Indust/Site Srvs Steelwor	rkers U.88934 1515 061	4001 .88934200 - Svsten 20.49 Hours
Factors 23.04 h	7 00.00 1.11 1.11 1.11 1.11 1.11 1.11 1	<u> </u>	10.00	20.101.100.0
				400] .88934200 - Systen
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Ex	p KE10H Indust/Site Srvs Steelwor	kers Linear	122.97 Hours
Factors 138.27 h			0.88934 [SVS.061	400] .88934200 - System
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Ex	p KE10H Indust/Site Srvs Steelwor	kers Linear	102.47 Hours
Factors 115.22 h				
		1.5	0.88934 [SYS 061	400] .88934200 - System
750 STRAIGHT TIME BASE Factors 138.27 h	C070 PAINTERS	KE10H Indust/Site Srvs Steelwor	kers Linear	122.97 Hours
130.27			0.88934 [SYS 061	4001 .88934200 - Svsten
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelwor		210.04 Hours
Factors 236.18 h				
750 STRAIGHT TIME BASE	COOK DILIMPEDO AND DIDEFITTEDO	KE10H Indust/Site Srvs Steelwor		4001 .88934200 - Svstem 81.98 Hours
Factors 92.18 h	C080 PLUMBERS AND PIPEFITTERS	RETUR lindust/Site Srvs Steelwor	rkers Linear	81.98IHours
<i>actors</i> 32.10 II			0.88934 ISYS 061	4001 .88934200 - Svsten
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwor		423.61 Hours
Factors 476.32 h				
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwor		4001 .88934200 - Svsten 66.59 Hours
Factors 74.87 h	1 COOU IFLUIVIBERS AND FIFEFITTERS	RETURN IIII III III III III III III III III	reis Lilleai	00.39Inouis
			0.88934 [SYS 061	4001 .88934200 - Svsten
750 STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL WORK	KE10H Indust/Site Srvs Steelwor	kers Linear	181.03 Hours
Factors 203.55 h			0.00004 701/0.004	4001 0000 4000 6 :
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelwor		4001 .88934200 - Svstem 9.22 Hours
Factors 10.37 h	COTO TOARFEINTERS	TE TOTH HILIDUS/JOHE SIVS STEERWOL	NEIS LIIIEAI	9.ZZINOUIS
			0.88934 [SYS 061	400] .88934200 - System

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl 1EFB

	Daseille Oost	Activity Filte	er * Starts In FY *
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 6.15 Hours
Factors 6.91 h			
	L cour louppeutene	VE 1011 1 1 1/01: 0 0: 1 1	0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 9.99lHours
Factors 11.23 h			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 3.08 Hours
Factors 3.46 h	T JOHN THE STATE OF THE STATE O	NE O I III GOVOIO DI TO COOMBINO	20104
			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 12.73 Hours
Factors 14.31 h			
		VE 1011 1 1 1/01: 0 0: 1 1	0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 13.32 Hours
Factors 14.98 h			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 14.86 Hours
Factors 16.71 h			
			0.88934 [SYS 0614001.88934200 - System
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Ex	KE10H Indust/Site Srvs Steelworkers	Linear 6.15 Hours
Factors 6.91 h			
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Ex	VE4011 Indust/Otto Comp Otto Investore	0.88934 [SYS 061400] .88934200 - Svstem Linear 5.12 Hours
751 OVERTIME BASE & PRE. Factors 5.76 h	C040 IMAINTENANCE MACHINIST (INCLEX	KETUH INDUST/SITE STVS STEETWORKERS	Linear 5.12 Hours
ractors 5.70 II			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Ex	KE10H Indust/Site Srvs Steelworkers	Linear 1.02 Hours
Factors 1.15 h			
			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear 6.15 Hours
Factors 6.91 h			
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400] .88934200 - System Linear 10.50 Hours
Factors 11.81 h	1 CU/U IPAINTERS	RETURN lindust/Site Sivs Steetworkers	Linear 10.50inouis
raciois 11.01 II			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear 4.10 Hours
Factors 4.61 h			
			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear 3.33 Hours
Factors 3.74 h			0.00004 [0)/0.0044001 00004000 0
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400] .88934200 - System Linear 21.18 Hours
Factors 23.82 h	C000 IFLUIVIBERS AND FIFEFITIERS	RETURN IIII III III III III III III III III	Lilledi 21.10iHuuis
20.02 11			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C090 STRUCTURAL AND METAL WORK	E KE10H Indust/Site Srvs Steelworkers	Linear 9.05 Hours
Factors 10.18 h			
			0.88934
A5C SUPPLIES	0000 NONE	C210S Facilities Momt & Maintenance	Linear 16.416.25 Dollars
Factors 1.015 FY00 Escalation	18186.1 d		0.0004 101/0.001 0000 105-
			0.88934 [SYS 061400] .88934200 - System

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site

maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl 1EFB

Activity Filter * Starts In FY

Curve

Ouantity

Units

in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 230 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$82.22 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 81% of the FY 99 budget per FCP 1999-8064

Department

Basis for adjustment - FCP 1999-8064 funding efficency return.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Cost Element

Maint. Mech 37.50% Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Skill

Resources

750 STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	245.93 Hours
Factors 276.53 h						
	T				0.88934 [SYS 061400	01 .88934200 - Svstem
750 STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	184.45 Hours
Factors 207.4 h						
				T-	0.88934 ISYS 061400	01 .88934200 - Svstem
750 STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	28.14 Hours
Factors 31.64 h						
				T-	0.88934 ISYS 061400	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	12.30 Hours
Factors 13.83 h						
				T-	0.88934 ISYS 061400	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	9.22 Hours
Factors 10.37 h						
				T-	0.88934 ISYS 061400	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.41 Hours
Factors 1.58 h						
				T-	0.88934 ISYS 061400	01 .88934200 - Svstem
A5C SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	1.824.03 Dollars
Factors 1.015 FY00 Escalation		2020.68 d				
					0.88934 [SYS 061400	01 .88934200 - System

Line Item SYS - Contingency And Escalation

BOE

Resources

ces Cost Element		Skill			Department	Curve	Quantity	Units	
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	3.220.99	Dollars
	Factors	3220.99 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	2.125.04	Dollars
	_	-							

Factors 2125.04 Dollars

Activity ID: 1EFB0085 Description: 331 Cluster Landlord Functions, FY02	Cost Risk	2	Schedule Risk
---	-----------	---	---------------

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
	Corrective maintenance	0.81	each	HC	2.855	2.312	49.872	13.297	0	63.169	17.605	80.774

Baseline Devl Proiect **Rocky Flats Closure Project** WRS Filter 1FFR

2.702

58.419

13.986

14.775

87.179

Activity ID.	TEI BOOOG	Baseline (Cost an	d Basis of E	Estimate	WD	or mer	_		
						Acti	ivitv Filter *	,	Stc	arts In FY
3	Preventive maintenance	0.81 each	HC	481	390	8.546	1.477	0	10.024	3.01
SYS	Contingency And Escalation	1.00 ea	EE	0	0	0	0	13.986	13.986	

Total for Activity 1EFB0085:

Line Item 1 - Corrective maintenance

1EFB03

1FFR0085

WBS No:

Activity ID:

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 214 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$543.48 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 81% of the FY 99 budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficency return.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 32.31% (includes Linemen)

Cost Element

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	122.97 Hours
Factors 138.27 h			0.88934 [SVS.0614)	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	199.83 Hours
Factors 224.69 h				
				001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	184.45 Hours
Factors 207.4 h			0.88934 [SYS.0614]	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	297.13 Hours
Factors 334.1 h				
			0.88934 [SYS 0614	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	254,46 Hours
Factors 286.12 h				
			0.88934 [SYS 0614	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	266.43 Hours
Factors 299.58 h				
			0.88934 [SYS 0614	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	61.48 Hours
Factors 69.13 h				
			0.88934 [SYS 0614	001 .88934200 - Svstem

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3.017

20.622

Units

13.041 13.986

107.801

 WBS No:
 1EFB03

 Activity ID:
 1EFB0085

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter

Baseline Devl 1EFB

121 20000	Baseline Cost	and Basis of Estimate	Filter *	Starts In FY *
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl E		Linear	122.97 Hours
Factors 138.27 h			0.80034 1676 0614	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl E	Exp. KE10H Indust/Site Style Steelworkers	0.00934 1313 0014 Linear	102.47 Hours
Factors 115.22 h	T COTO IIVIAINTENANCE WACHINIST THE E	AD TILL TOTT THINGSVOILE GIVS SIEEWOLKETS	Linear	102.471110013
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl E	VEAUL Indust/Cite Care Chaplustrate	0.88934 [SYS 0614 Linear	001 .88934200 - Svstem 20.49 Hours
Factors 23.04 h	1 C040 IMAINTENANCE MACHINIST THE E	XD KETOH IIIdusi/Site Sivs Steelworkers	Linear	20.49Inouis
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 0614 Linear	001 .88934200 - Svstem 122.97 Hours
Factors 138.27 h	T COTO IFAINTLING	AL 1011 IIIIdusi/Site Sivs Steelworkers		
750 OTRAIGUT TIME BAGE	COTO DAINITEDO	V540V I I V0': 0 0 1 I		001 .88934200 - System
750 STRAIGHT TIME BASE Factors 236.18 h	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	210.04 Hours
230.10 11			0.88934 [SYS 0614	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	
Factors 74.87 h				
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 ISYS 0614 Linear	001 .88934200 - Svstem 81.98 Hours
Factors 92.18 h	T COOK IN ECHNIDERS AND THE ETH TERS	I IL 1011 IIIIdds/Joile Olvs Steelworkers	Lilleai	01.301110013
				001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	423.61 Hours
Factors 476.32 h			0.88934 [SVS.0614	00] .88934200 - System
750 STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL WORK	KE KE10H Indust/Site Srvs Steelworkers	Linear	181.03 Hours
Factors 203.55 h				
				00] .88934200 - System
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	9.22 Hours
Factors 10.37 h			0.88934 ISYS 0614	00] .88934200 - System
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	6.15 Hours
Factors 6.91 h				
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 0614 Linear	001 .88934200 - Svstem 9.99 Hours
Factors 11.23 h	COTO_ICARPENTERS	RETUR IIIIdust/Site Sivs Steelworkers	Linear	9.99Inours
			0.88934 [SYS 0614	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	12.73 Hours
Factors 14.31 h			0.00004 100/0.0044	001 0000 4000 0 4
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	0.88934 ISYS 0614 Linear	001 .88934200 - Svstem 13.32 Hours
Factors 14.98 h	T COZO IELECTIVICIANO	TAL TOTT HINGUS/FORE GIVS STEELWOLKETS	Linear	10.021110013
754 OVERTIME DAGE 0 DOS	Occos EL FOTDIQUANO			001 .88934200 - System
751 OVERTIME BASE & PRE. Factors 16.71 h	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	14.86 Hours
10.71			0.88934 [SYS 0614	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	3.08 Hours
Factors 3.46 h				
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl E	VE10H Indust/Site Save Stackwarker-	0.88934 [SYS 0614 Linear	001 .88934200 - Svstem 6.15 Hours
751 OVERTIME BASE & PRE. Factors 6.91 h	I CU4U IMAINTENANCE MACHINIST (INCLE	XV NE IUFI INQUST/SITE STVS STEETWOFKERS	Linear	b.15IHOUIS
0.31			0.88934 [SYS 0614	00] .88934200 - System

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl 1EFB

0.88934 [SYS 061400] .88934200 - System

			Baseline Cost an	d Basis	of Estimate	Activity Filter *		Starts In FY *
751	OVERTIME BASE & PRE.	C040 MAIN	TENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	3	Linear	1.02 Hours
Factors	1.15 h							
		1					0.88934 [SYS 06	14001 .88934200 - Svstem
751	OVERTIME BASE & PRE.	C040 MAIN	TENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	S	Linear	5.12 Hours
Factors	5.76 h							
							0.88934 [SYS 06	14001 .88934200 - Svstem
751	OVERTIME BASE & PRE.	C070 PAIN	TERS	KE10H	Indust/Site Srvs Steelworkers	3	Linear	6.15 Hours
Factors	6.91 h							
_							0.88934 [SYS 06	14001 .88934200 - Svstem
751	OVERTIME BASE & PRE.	C070 PAIN	TERS	KE10H	Indust/Site Srvs Steelworkers	3	Linear	10.50 Hours
Factors	11.81 h							
							0.88934 [SYS 06	14001 .88934200 - Svstem
751	OVERTIME BASE & PRE.	C080 PLUM	MBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	3	Linear	21.18 Hours
Factors	23.82 h							
							0.88934 [SYS 06	14001 .88934200 - Svstem
751	OVERTIME BASE & PRE.	C080 PLUM	MBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	3	Linear	3.33 Hours
Factors	3.74 h							
							0.88934 [SYS 06	14001 .88934200 - System
751	OVERTIME BASE & PRE.	C080 PLUM	MBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	3	Linear	4.10 Hours
Factors	4.61 h							
							0.88934 [SYS 06	14001 .88934200 - Svstem
751	OVERTIME BASE & PRE.	C090 STRU	JCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	3	Linear	9.05 Hours
Factors	10.18 h							
							0.88934 [SYS 06	1400] .88934200 - System
A5C	SUPPLIES	0000 NONE		C210S	Facilities Mgmt & Maintenand	ce	Linear	16,416.25 Dollars
Factors	18186.1 d	1.01	15 FY00 Escalation					

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 230 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$82.22 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 81% of the FY 99 budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficency return.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50% Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources Cost Element	Skill	Department	Curve	<i>Ouantity</i>	Units	

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter

Baseline Devl er 1EFB

			Baseille Cost al	iu Dasis	Of Estimate	Activity Filter *		Starts In FY *
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers		Linear	245.93 Hours
Factors	276.53 h							
		ı		I			0.88934 [SYS 06140	01 .88934200 - Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers		Linear	184.45 Hours
actors	207.4 h							
							0.88934 [SYS 06140	01.88934200 - Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers		Linear	28.14 Hours
Factors	31.64 h							
							0.88934 [SYS 06140	01.88934200 - Svstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers		Linear	12.30 Hours
Factors	13.83 h							
							0.88934 [SYS 06140	01 .88934200 - Svstem
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers		Linear	9.22 Hours
Factors	10.37 h							
							0.88934 [SYS 06140	01 .88934200 - Svstem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers		Linear	1.41 Hours
Factors	1.58 h							
							0.88934 [SYS 06140	01 .88934200 - Svstem
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenanc	е	Linear	1.824.03 Dollars
Factors	1.015 FY00 Escalation		2020.68 d					

Line Item SYS - Contingency And Escalation

BOE

Resources

es		Cost Element	Skill			Department	Curve	Ouantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	9.601.67	Dollars
-	Factors	9601.67 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	4.384.11	Dollars

Factors 4384.11 Dollars

Activity ID: 1EFB0090 Description: 331 Cluster Landlord Functions, FY03

Cost Risk 2 Schedule Risk

0.88934 [SYS 061400] .88934200 - System

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
				Type	110urs/Onn	Totat	Totai	Cosi	& Escalation	Cosi		
1	Corrective maintenance	0.81	each	HC	2.855	2.312	49.872	13.297	0	63.169	17.256	80.425
3	Preventive maintenance	0.81	each	HC	481	390	8.546	1.477	0	10.024	2.957	12.981
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	25.832	25.832	0	25.832
	Tota	al for Activi	ty 1EFB0090	D:		2.702	58.419	14.775	25.832	99.025	20.213	119.238

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 214 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$543.48 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 81% of the FY 99 budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficency return.

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Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Baseline Devl Proiect WBS Filter 1EFB Activity Filter

Starts In FY *

The percentage of maintenance effort (labor Type) is as follows:

15.38%

32.31% (includes Linemen)

Carpenter Electrician Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

		*		
Cost Element	Skill	Department	Curve	Ouantity Units
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	122.97 Hours
Factors 138.27 h				
750 OTDAIOUT TIME DAGE	C010 CARPENTERS	IVEAULT In durat/Oita Come Ota-hundung	0.88934 ISYS 061 Linear	14001 .88934200 - Svstem 199.83 Hours
750 STRAIGHT TIME BASE Factors 224.69 h	I CUTU ICARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	199.83IHOUIS
Factors 224.69 h			0.88934 [SYS 061	14001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	184.45 Hours
Factors 207.4 h				
	T			14001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	254.46 Hours
Factors 286.12 h			0.88834 [575.064	14001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srys Steelworkers	Linear	297.13 Hours
Factors 334.1 h	1 OVEO TELEOTTIVO INTO	TE TOTAL III MANON ON O STATE OF THE STATE O	Ellivai	201.10110410
			0.88934 [SYS 061	14001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	61.48 Hours
Factors 69.13 h				
				14001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	266.43 Hours
Factors 299.58 h			0.00004 [CVC.064	1400] .88934200 - System
750 STRAIGHT TIME BASE	CO40 MAINTENANCE MACHINIST (inc	cl Exp KD10H 776 Complex Steelworkers	0.88934 (515 06) Linear	102.47 Hours
Factors 115.22 h	1 CO40 IMAINTENANCE MACHINIST (IIII	CLEAD RETOIT 1110 Complex Steelworkers	Linear	102.47[110013
1 40.075			0.88934 [SYS 061	1400] .88934200 - System
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (inc	cl Exp KE10H Indust/Site Srvs Steelworkers	Linear	122.97 Hours
Factors 138.27 h				
			0.88934 [SYS 061	1400] .88934200 - System
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (inc	cl Exp KE10H Indust/Site Srvs Steelworkers	Linear	20.49 Hours
Factors 23.04 h			0.00024 [CVC.064	14001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 1515 06 Linear	122.97 Hours
Factors 138.27 h	1 COTO II AIRTENS	TICLIOIT IIII III III III III III III III II	Lineal	122.971110013
100.21			0.88934 [SYS 061	14001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	210.04 Hours
Factors 236.18 h				
				14001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	66.59 Hours
Factors 74.87 h			0.00004 10000	14001 00004000 0 :
750 STRAIGHT TIME BASE	CORO DI LIMPERS AND DIRECTTERS	KE10H Indust/Site Srvs Steelworkers		14001 .88934200 - Svstem 423.61 Hours
750 STRAIGHT TIME BASE Factors 476.32 h	C080 PLUMBERS AND PIPEFITTERS	NETUH IIIndust/Site Stys Steelworkers	Linear	423.61IHOUIS
Fuciors 470.32 II			0.88934 [SVS.061	14001 .88934200 - Svstem
-			0.00307 1010 00	1001.00004200 Ovstelli

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filte

Baseline Devl ter 1EFB Filter *

C080 PLUMBERS AND PIPEFITTERS C090 STRUCTURAL AND METAL WORKE		Indust/Site Srvs Steelworkers	vity Filter * Linear 0.88934 ISVS 061400	Starts In FY * 81.98 Hours
C090 STRUCTURAL AND METAL WORKE	KE10H		0.88934 [SVS.061400	1 00004000 0 :
C090 STRUCTURAL AND METAL WORKE	KE10H		0.88934 [SVS.061400	1 00004000 0 :
I C090 ISTRUCTURAL AND METAL WORKE	KE10H			1 .88934200 - Svstem
	INE IUIT	Indust/Site Srvs Steelworkers	Linear	181.03 Hours
			0.88934 [SYS 061400	11 88934200 - System
C010 CARPENTERS	KD10H	776 Complex Steelworkers	0.00354 1313 001400 Linear	9.22 Hours
CO10 CARDENTERS	KE10H	Indust/Sita Save Staalwarkers		0.15 - 0.88934200 - Svstem 6.15 Hours
1 COTO ICANFENTENS	I KL IVII	muus/Site Sivs Steelworkers	Lilleal	0.131110015
			0.88934 ISYS 061400	1 .88934200 - Svstem
C010 CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	9.99 Hours
CO20 ELECTRICIANS	VE10H	Indust/Site Saye Steelworkers		01 .88934200 - Svstem 12.73 Hours
CO20 IELECTRICIANS	KETUH	ilidusi/Site Sivs Steelworkers	Lilleal	12.7 SITIOUIS
			0.88934 ISYS 061400	1 .88934200 - Svstem
C020 ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	14.86 Hours
CO20 ELECTRICIANS	KE4011	Indust/Cita Crua Ctachuarkara		01 .88934200 - Svstem 3.08 Hours
CO20 ELECTRICIANS	KETUH	Indust/Site Sivs Steelworkers	Linear	3.06 1100 15
			0.88934 [SYS 061400	1 .88934200 - System
C020 ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	13.32 Hours
0040 144117514410514404111105777	1/5/01/			
C040 IMAINTENANCE MACHINIST (Incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	6.15 Hours
			0.88934 [SYS.061400	1 88934200 - System
C040 MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	5.12 Hours
T				
I C040 IMAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.02 Hours
			0.88034 [SVS.061400	11 99034300 Systom
C070 PAINTERS	KF10H	Indust/Site Srvs Steelworkers		6.15 Hours
C070 PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	10.50 Hours
			0.00004 100/0.004400	N 00004000 Custom
CORO PLLIMBERS AND PIPEFITTERS	KE10H	Indust/Site Srys Steelworkers		21.18 Hours
T COOK II ECINICETTO / ITE ET IT ETTO	1 1 1 1 1 1 1	madovone orvo oteciwornero	Lincai	21.101110013
	,		0.88934 [SYS 061400	l .88934200 - Svstem
C080 PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.10 Hours
COOL DILIMPEDS AND DIDEFITTEDS	VE4011	Indust/Cita Crus Ctashuarian-		01 .88934200 - Svstem 3.33 Hours
I COOU IPLUMBERS AND PIPEFITTERS	KETUH	iiiiuusi/oite orvs oteelworkers	Linear	3.33IHOUIS
			0.88934 [SYS 061400	1 .88934200 - System
	C020 ELECTRICIANS C020 ELECTRICIANS C020 ELECTRICIANS C020 ELECTRICIANS C040 MAINTENANCE MACHINIST (incl Exp	C010 CARPENTERS KE10H C020 ELECTRICIANS KE10H C020 ELECTRICIANS KE10H C020 ELECTRICIANS KE10H C020 ELECTRICIANS KE10H C040 MAINTENANCE MACHINIST (incl Exp. KE10H C040 MAINTENANCE MACHINIST (incl Exp. KE10H C040 MAINTENANCE MACHINIST (incl Exp. KE10H C070 PAINTERS KE10H C070 PAINTERS KE10H C080 PLUMBERS AND PIPEFITTERS KE10H	C020 ELECTRICIANS KE10H Indust/Site Srvs Steelworkers	0.88934 ISYS 061400

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl 1EFB

					Activity Filter	*	Starts In FY *
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	9.05 Hours
Factors	10.18 h		•		·		
						0.88934 [SYS 06140	01 .88934200 - Svstem
A.F.C	SLIDDLIES	0000	NONE	C210S	Excilities Mant & Maintenance	Lincor	16 416 25 Dollars

Factors 1.015 -- FY00 Escalation -- 18186.1 d

0.88934 [SYS 061400] .88934200 - System

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average

number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 230 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$82.22 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 81% of the FY 99

budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficency return.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50%

Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

s	Cost Element		Skill	Department	Curve	Ouantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	245.93 H	lours
Factors	276.53 h						
					0.88934 [SYS 06140	01 .88934200 - S	vstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear	184.45 H	lours
Factors	207.4 h						
					0.88934 [SYS 06140	01 .88934200 - S	vstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	28.14 H	lours
Factors	31.64 h						
			_		0.88934 [SYS 06140	01 .88934200 - S	vstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	12.30 H	lours
Factors	13.83 h						
			_		0.88934 [SYS 06140	01 .88934200 - S	vstem
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear	9.22 H	lours
Factors	10.37 h						
					0.88934 [SYS 06140	01 .88934200 - S	vstem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	1.41 H	lours
Factors	1.58 h						
	1		_		0.88934 [SYS 06140	01 .88934200 - S	vstem
A5C	SUPPLIES	0000	NONE	C210S Facilities Mamt & Maintenance	Linear	1.824.03	Oollars
Factors	1.015 FY00 Escalation		2020.68 d				
					0.88934 [SYS 06140	01 .88934200 - S	ystem

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect | WBS Filter | Activity Filter | 1

Baseline Devl 1EFB

Starts In FY

Line Item SYS - Contingency And Escalation

BOE

Resources	Cost Element		Skill			Department	Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	18.668.85	Dollars
	Factors 18668.9 Dollars								
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	7.162.86	Dollars

Factors 7162.86 Dollars

WBS No: 1EFB0	4 Title: 551 Cluster Landlord											
Activity ID: 1EFE	Description: 551 Cluster Landlord Function	ns, FY00						Cost Risk	2 Schedule R	?isk 1		
Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Corrective maintenance	1.00	each	НС	23	23	487	130	0	617	238	855
1a	Corrective maintenance	0.96	each	HC	4.569	4.386	94.909	28.067	0	122.975	46.315	169.291
1b	Corrective maintenance	1.00	each	HC	401	401	8.638	2.795	0	11.433	4.215	15.648
3	Preventive maintenance	1.00	each	HC	4	4	83	14	0	98	41	139
3a	Preventive maintenance	0.96	each	HC	1.079	1.036	22.707	3.925	0	26.632	11.081	37.713
3b	Preventive maintenance	1.00	each	HC	82	82	1.797	311	0	2.107	877	2.984
	Total	al for Activi	ty 1EFB009	5:		5.932	128.620	35.242	0	163.863	62.767	226.629

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 5 corrective/routine maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$327 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99 Basis for adjustment - None.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 32.31% (includes Linemen)

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

ou	rces
	ou

s		Cost Element		Skill	Department	Curve	<i>Ouantity</i>	Units
	750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	1.58	Hours

Factors 3.16 h 0.3612 May 2000 Earned Value Factor

1.38645 [SYS 061300] 1.386448 - Target

 WBS No:
 1EFB04

 Activity ID:
 1EFB0095

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filter

Baseline Devl 1EFB

	Daseille	Cost and Basis of Estimate Activity	Filter * Starts In FY	*
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 0.97 H	Hours
Factors 1.94 h	0.3612 May 2000 Earned	Value Factor		
			1.38645 [SYS 061300] 1.386448 - Tar	raet
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 1.46H	Hours
Factors 2.92 h	0.3612 May 2000 Earned	Value Factor		
			1.38645 [SYS 061300] 1.386448 - Tar	
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 2.35 H	Hours
Factors 4.7 h	0.3612 May 2000 Earned	Value Factor	1.38645 [SYS 061300] 1.386448 - Tar	raet
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 2.01H	
Factors 4.02 h	0.3612 May 2000 Earned			
			1.38645 [SYS 061300] 1.386448 - Tar	raet
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 2.11 H	
Factors 4.21 h	0.3612 May 2000 Earned	Value Factor		
			1.38645 [SYS 061300] 1.386448 - Tar	raet
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 0.49H	Hours
Factors 0.97 h	0.3612 May 2000 Earned	Value Factor		
			1.38645 [SYS 061300] 1.386448 - Tar	raet
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST	(incl Exp KE10H Indust/Site Srvs Steelworkers	Linear 0.81 H	Hours
Factors 1.62 h	0.3612 May 2000 Earned '	Value Factor		
			1.38645 [SYS 061300] 1.386448 - Tar	
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST	(incl Exp KE10H Indust/Site Srvs Steelworkers	Linear 0.97 H	Hours
Factors 1.94 h	0.3612 May 2000 Earned	Value Factor		
	T		1.38645 [SYS 061300] 1.386448 - Tar	
750 STRAIGHT TIME BASE		(incl Exp KE10H Indust/Site Srvs Steelworkers	Linear 0.16H	<u>Hours</u>
Factors 0.32 h	0.3612 May 2000 Earned	Value Factor		
T			1.38645 [SYS 061300] 1.386448 - Tar	
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear 1.66 H	<u>Hours</u>
Factors 3.32 h	0.3612 May 2000 Earned	Value Factor	1.38645 [SYS 061300] 1.386448 - Tar	raet
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear 0.97IH	Hours
Factors 1.94 h	0.3612 May 2000 Earned			
			1.38645 [SYS 061300] 1.386448 - Tar	raet
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTE	RS KE10H Indust/Site Srvs Steelworkers	Linear 0.53H	Hours
Factors 1.05 h	0.3612 May 2000 Earned	Value Factor		
			1.38645 [SYS 061300] 1.386448 - Tar	raet
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTE	RS KE10H Indust/Site Srvs Steelworkers	Linear 0.65 H	Hours
Factors 1.3 h	0.3612 May 2000 Earned	Value Factor		
			1.38645 [SYS 061300] 1.386448 - Tar	
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTE	RS KE10H Indust/Site Srvs Steelworkers	Linear 3.36H	Hours
Factors 6.7 h	0.3612 May 2000 Earned	Value Factor	1.38645 [SYS 061300] 1.386448 - Tar	rant
750 STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL V	NORKE KE10H Indust/Site Srvs Steelworkers	1.38645 1515 06130011.366446 - Tali Linear 1.43IH	
Factors 2.86 h	0.3612 May 2000 Earned			
			1.38645 [SYS 061300] 1.386448 - Tar	
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 0.08lH	Hours
Factors 0.15 h	0.3612 May 2000 Earned	Value Factor		
			1.38645 [SYS 061300] 1.386448 - Tar	
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 0.08lH	Hours
Factors 0.16 h	0.3612 May 2000 Earned	Value Factor		
			1.38645 [SYS 061300] 1.386448 - Tar	rget

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl 1EFB

	Daseille	Activity Filter	* Starts In FY *
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 0.05 Hours
Factors 0.1 h	0.3612 May 2000 Earned \	/alue Factor	
			1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 0.10 Hours
Factors 0.2 h	0.3612 May 2000 Earned \	/alue Factor	4 20045 IOVO 00420014 200440 T
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	1.38645 [SYS 061300] 1.386448 - Target Linear 0.11 Hours
Factors 0.21 h	0.3612 May 2000 Earned \		Lilleal 0.11iillouis
0.21	0.5012 Way 2500 Earlied	value i doloi	1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 0.12 Hours
Factors 0.23 h	0.3612 May 2000 Earned \		
			1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 0.03 Hours
Factors 0.05 h	0.3612 May 2000 Earned \	/alue Factor	
		" 15 1/5/01/ 1 //0" 0 0 1 1	1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE. Factors 0.1 h	0.3612 May 2000 Earned	incl Exp KE10H Indust/Site Srvs Steelworkers	Linear 0.05 Hours
Factors 0.1 h	0.3612 May 2000 Earned V	value Factor	1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.	CO40 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers	Linear 0.01 Hours
Factors 0.02 h	0.3612 May 2000 Earned \		Linear
0.02	0.0012 May 2000 Earnou	value i doloi	1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers	Linear 0.04 Hours
Factors 0.08 h	0.3612 May 2000 Earned \		
			1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear 0.05 Hours
Factors 0.1 h	0.3612 May 2000 Earned \	/alue Factor	
	0000 0101000	1/5/01/ 1 1/0/: 0 0/ 1 1	1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C070 PAINTERS 0.3612 May 2000 Earned \	KE10H Indust/Site Srvs Steelworkers	Linear 0.09 Hours
Factors 0.17 h	0.3612 May 2000 Earned V	value Factor	1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTER	RS KE10H Indust/Site Srvs Steelworkers	Linear 0.03 Hours
Factors 0.06 h	0.3612 May 2000 Earned \		Linear C.Om Tours
1 4000.5	0.00.12 may 2000 2amou		1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTER	RS KE10H Indust/Site Srvs Steelworkers	Linear 0.03 Hours
Factors 0.05 h	0.3612 May 2000 Earned \	/alue Factor	
			1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTER		Linear 0.17 Hours
Factors 0.33 h	0.3612 May 2000 Earned \	/alue Factor	
754 01/507145 0405 0 055	Occo OTRUCTURAL AND METALL	NODICE KEYOU II I VOY O O I I I	1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.		VORKE KE10H Indust/Site Srvs Steelworkers	Linear 0.07 Hours
Factors 0.14 h	0.3612 May 2000 Earned \	value racioi	1.38645 [SYS 061300] 1.386448 - Target
A5C SUPPLIES	0000 NONE	C210S Facilities Mgmt & Maintenance	Linear 129.94 Dolla
Factors 255.63 d	1.015 FY00 Escalation		Linea 129.94IDOlla
200.00 4	1.010 1100 Escalation	5.5512 May 2555 Earned Value I dolor	1.38645 [SYS 061300] 1.386448 - Target
			io io io io io io in indication in indication

Line Item 1a - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filter

1EFB

Starts In FY

Baseline Devl

·Approximately 752 corrective/routine maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$615.72 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 96% of the FY 99

budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficency return.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 32.31% (includes Linemen)

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

s	Cost Element	Skill	Department	Curve	Ouantity Units
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	346.59 Hours
Factors	692.1 h	0.3612 Mayy 2000 Earned	Value Factor		
				1.38645 [SYS 0613	3001 1.386448 - Target
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	275.66 Hours
Factors	550.45 h	0.3612 May 2000 Earned \	Value Factor		
				1.38645 [SYS 0613	3001 1.386448 - Target
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	413.48 Hours
Factors	825.67 h	0.3612 May 2000 Earned \	Value Factor		
	I			1.38645 [SYS 0613	3001 1.386448 - Target
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	194.35 Hours
Factors	388.1 h	0.3612 May 2000 Earned \	Value Factor		
				1.38645 [SYS 0613	3001 1.386448 - Target
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	137.83 Hours
Factors	275.22 h	0.3612 May 2000 Earned \	Value Factor		
					3001 1.386448 - Target
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	199.13lHours
Factors	397.64 h	0.3612 May 2000 Earned	Value Factor		
		1			3001 1.386448 - Target
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	229.39lHours
Factors	458.07 h	0.3612 May 2000 Earned	Value Factor		
	I	T I			3001 1.386448 - Target
750	STRAIGHT TIME BASE		(incl Exp KE10H Indust/Site Srvs Steelworkers	Linear	45.94lHours
Factors	91.74 h	0.3612 May 2000 Earned \	Value Factor		
	OTD 4 (0) IT TIME D 4 0 F	0040 144007504005 144000000	" I		3001 1.386448 - Target
750	STRAIGHT TIME BASE		(incl Exp KE10H Indust/Site Srvs Steelworkers	Linear	229.72 Hours
Factors	458.71 h	0.3612 May 2000 Earned \	value Factor	4 000 45 10 1/0 00 4	2001 4 000440 T
750	OTD A IOUT TIME DAGE	OO 40 MAINTENANOE MAQUINIOT	(;		3001 1.386448 - Target
750	STRAIGHT TIME BASE 550.45 h	L C040 IMAINTENANCE MACHINIST (0.3612 May 2000 Earned \	(incl Exp KE10H Indust/Site Srvs Steelworkers	Linear	275.66lHours
Factors	550.45 H	0.3012 IVIAY 2000 Earned	value facioi	1 2064E ISVS 0611	3001 1.386448 - Target
•	•	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	1.30045 1515 0613	0001 1.300446 - Taluet

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WBS No: 1EFB04 1EFB0095 Activity ID:

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect

Baseline Devl WBS Filter 1E
Activity Filter * 1EFB

1EFB0095	Baseline Cost and Basis of Estimate WBS Filter Activity Filte	1EFB	Starts In FY *
750 STRAIGHT TIME BASE	C070 PAINTERS KE10H Indust/Site Srvs Steelworkers	Linear	320.64 Hours
Factors 640.27 h	0.3612 May 2000 Earned Value Factor		
			3001 1.386448 - Target
750 STRAIGHT TIME BASE	C070 PAINTERS KE10H Indust/Site Srvs Steelworkers	Linear	275.66 Hours
Factors 550.45 h	0.3612 May 2000 Earned Value Factor	1 38645 [SVS 061	3001 1.386448 - Target
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers	Linear	582.54 Hours
Factors 1163.26 h	0.3612 May 2000 Earned Value Factor		
		1.38645 [SYS 061	3001 1.386448 - Target
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers	Linear	149.27 Hours
Factors 298.08 h	0.3612 May 2000 Earned Value Factor	4 2004E ISVO 004	2001 4 200440 Torrest
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers	Linear	3001 1.386448 - Target 182.77 Hours
Factors 364.97 h	0.3612 May 2000 Earned Value Factor		, , , , , , , , , , , , , , , , , , , ,
		1.38645 [SYS 061	3001 1.386448 - Target
750 STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL WORKE KE10H Indust/Site Srvs Steelworkers	Linear	405.82 Hours
Factors 810.37 h	0.3612 May 2000 Earned Value Factor		
			3001 1.386448 - Target
751 OVERTIME BASE & PRE.	C010 CARPENTERS KE10H Indust/Site Srvs Steelworkers	Linear	13.78 Hours
Factors 27.52 h	0.3612 May 2000 Earned Value Factor	4 000 45 10 10 00	10001 4 000440 T
751 OVERTIME BASE & PRE.	C010 CARPENTERS KE10H Indust/Site Srvs Steelworkers	1.38645 ISYS 061 Linear	3001 1.386448 - Target 22.40 Hours
Factors 44.73 h	0.3612 May 2000 Earned Value Factor	Lilledi	22.40 Flouis
14.70	0.0012 Way 2000 Earried Value Factor	1 38645 ISYS 061	300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C010 CARPENTERS KE10H Indust/Site Srvs Steelworkers	Linear	20.67 Hours
Factors 41.28 h	0.3612 May 2000 Earned Value Factor		
		1.38645 [SYS 061	300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS KE10H Indust/Site Srvs Steelworkers	Linear	29.86 Hours
Factors 59.63 h	0.3612 May 2000 Earned Value Factor		
			300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS KE10H Indust/Site Srvs Steelworkers	Linear	6.89 Hours
Factors 13.76 h	0.3612 May 2000 Earned Value Factor	1 2004E TOVO 001	3001 1.386448 - Target
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS KE10H Indust/Site Srys Steelworkers	Linear	28.52 Hours
Factors 56.95 h	0.3612 May 2000 Earned Value Factor	Lilleal	20.321110013
1 401073	010012 Maj 2000 2amou (and) (and)	1.38645 [SYS 061	3001 1.386448 - Target
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS KE10H Indust/Site Srvs Steelworkers	Linear	33.30 Hours
Factors 66.5 h	0.3612 May 2000 Earned Value Factor		
			3001 1.386448 - Target
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers	Linear	13.78 Hours
Factors 27.52 h	0.3612 May 2000 Earned Value Factor	4 000 45 10 10 00	1000] 4 000440 T
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers	1.38645 15 Y S U61	3001 1.386448 - Target 2.30 Hours
Factors 4.59 h	0.3612 May 2000 Earned Value Factor	Lilleal	2.301110015
1.00	0.0012 May 2000 Earnor Value I doloi	1.38645 [SYS 061	3001 1.386448 - Target
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers	Linear	11.49 Hours
Factors 22.94 h	0.3612 May 2000 Earned Value Factor		
		1.38645 [SYS 061	3001 1.386448 - Target
751 OVERTIME BASE & PRE.	C070 PAINTERS KE10H Indust/Site Srvs Steelworkers	Linear	13.78 Hours
Factors 27.52 h	0.3612 May 2000 Earned Value Factor		
		1.38645 [SYS 061	300] 1.386448 - Target

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Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter

Baseline Devl 1EFB

	Daseille Oost a	na basis of Estimate	Activity Filter *	Starts In FY *
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworke	ers Linear	23.54 Hours
Factors 47.01 h	0.3612 May 2000 Earned Value Fa	ctor		
			1.38645 [SYS 0613	001 1.386448 - Target
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworke	ers Linear	47.48 Hours
Factors 94.81 h	0.3612 May 2000 Earned Value Fa	ctor		
			1.38645 [SYS 0613	001 1.386448 - Target
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworke	ers Linear	9.19 Hours
Factors 18.35 h	0.3612 May 2000 Earned Value Fa	ctor		
			1.38645 [SYS 0613	001 1.386448 - Target
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworke	ers Linear	7.46 Hours
Factors 14.9 h	0.3612 May 2000 Earned Value Fa	ctor		
			1.38645 [SYS 0613	001 1.386448 - Target
751 OVERTIME BASE & PRE.	C090 STRUCTURAL AND METAL WORKE	KE10H Indust/Site Srvs Steelworke	ers Linear	20.29 Hours
Factors 40.52 h	0.3612 May 2000 Earned Value Fa	ctor		
			1.38645 [SYS 0613	001 1.386448 - Target
A5C SUPPLIES	0000 NONE	C210S Facilities Mamt & Maintena	ince Linear	29.236.21 Dollars
Factors 1.015 FY00 Escalation	57518 d	0.3612 May 2000 Earne	d Value Factor	
			4 000 45 1000 0040	001 4 000 4 40 T

Line Item 1b - Corrective maintenance

1.38645 [SYS 061300] 1.386448 - Target

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 74 corrective/routine maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$475.24 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. This year is based on executing the same level of effort as in FY 99.

Revised number of work orders - none

Basis for adjustment - none.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 32.31 Linemen)

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

s		Cost Element		Skill	Department	Curve	Quantity	Units
Ĺ	750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	34.02	Hours

67.94 h 0.3612 May 2000 Earned Value Factor Factors

1.38645 [SYS 061300] 1.386448 - Target

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Ba
WBS Filter 1E
Activity Filter *

Baseline Devl 1EFB

	Baseline Co	st and Basis of Estimate	WBS Filter 1EFB Activity Filter *	Starts In FY *
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers		20.94 Hours
Factors 41.81 h	0.3612 May 2000 Earned Valu		,	•
				3001 1.386448 - Target
750 STRAIGHT TIME BASE Factors 62.71 h	C010 CARPENTERS 0.3612 May 2000 Earned Valu	KE10H Indust/Site Srvs Steelworkers	Linear	31.40 Hours
Factors 62.71 h	0.3612 May 2000 Earned Valu	de Factor	1 38645 ISYS 061	3001 1.386448 - Target
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers		10.47 Hours
Factors 20.9 h	0.3612 May 2000 Earned Valu	ue Factor		
				3001 1.386448 - Target
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	8.16 Hours
Factors 16.3 h	0.3612 May 2000 Earned Valu	ue Factor	1 38645 [SVS 061	3001 1.386448 - Target
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers		43.32 Hours
Factors 86.51 h	0.3612 May 2000 Earned Valu			
				3001 1.386448 - Target
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	45.36 Hours
Factors 90.58 h	0.3612 May 2000 Earned Valu	ue Factor	1 2064E ISVS 064	3001 1.386448 - Target
750 STRAIGHT TIME BASE	CO40 MAINTENANCE MACHINIST (inc	Exp KE10H Indust/Site Srvs Steelworkers	1.36049 1313 061 Linear	3.49 Hours
Factors 6.97 h	0.3612 May 2000 Earned Value		Lilioni	O. TOIL TOUTO
				3001 1.386448 - Target
750 STRAIGHT TIME BASE		Exp KE10H Indust/Site Srvs Steelworkers	Linear	20.94 Hours
Factors 41.81 h	0.3612 May 2000 Earned Valu	ue Factor	4 000 45 100/0 004	
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (inc	Exp KE10H Indust/Site Srvs Steelworkers		300] 1.386448 - Target 17.45 Hours
Factors 34.84 h	0.3612 May 2000 Earned Value		Lilleal	17.45 HOUIS
01.01	0.0012 May 2000 Earnou Valo	20 1 40.01	1.38645 [SYS 061	300] 1.386448 - Target
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	20.94 Hours
Factors 41.81 h	0.3612 May 2000 Earned Valu	ue Factor		
TEO OTDAIOUT TIME BAGE	OOTO DAINTERO	1/5/01/ 1 1/07/ 0 0/ 1 1		300] 1.386448 - Target
750 STRAIGHT TIME BASE Factors 71.42 h	C070 PAINTERS 0.3612 May 2000 Earned Valu	KE10H Indust/Site Srvs Steelworkers	Linear	35.77 Hours
Actors 11.42 11	0.3012 Way 2000 Lamed Valo	de l'actor	1 38645 ISYS 061	3001 1.386448 - Target
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers		13.96 Hours
Factors 27.87 h	0.3612 May 2000 Earned Valu	ue Factor		
				3001 1.386448 - Target
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS		Linear	11.34 Hours
Factors 22.64 h	0.3612 May 2000 Earned Valu	Je Factor	1 38645 ISVS 061	3001 1.386448 - Target
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers		
Factors 59.03 h	0.3612 May 2000 Earned Valu			
				3001 1.386448 - Target
750 STRAIGHT TIME BASE		RKE KE10H Indust/Site Srvs Steelworkers	Linear	30.82 Hours
Factors 61.55 h	0.3612 May 2000 Earned Value	ue Factor	4 20045 1000 204	2001 4 200440 To
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers		300] 1.386448 - Target 1.70 Hours
Factors 3.4 h	0.3612 May 2000 Earned Value		Lineal	1.70INOUIS
	ologie individual		1.38645 [SYS 061	3001 1.386448 - Target
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers		1.05 Hours
731 OVER HIVE BASE & PRE.	0.3612 Mary 2000 Earned Val		Elliou	1.001110010

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Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Proiect WBS Filter

ct Baseline Devl Filter 1EFB

		Activity Filter	* Starts In FY *
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 1.57 Hour
Factors 3.14 h	0.3612 May 2000 Earned Va	alue Factor	
			1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 2.53 Hour
Factors 5.05 h	0.3612 May 2000 Earned Va	alue Factor	4 00045 [0V0 004000] 4 000440 T
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	1.38645 [SYS 061300] 1.386448 - Target Linear 0.53 Hour
Factors 1.05 h	0.3612 May 2000 Earned Va		Lineal 0.55li loui
1.00	0.0012 Way 2000 Earnou ve		1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 2.17 Hour
Factors 4.33 h	0.3612 May 2000 Earned Va		
			1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 2.27 Hour
Factors 4.53 h	0.3612 May 2000 Earned Va	alue Factor	4 000 45 (0)/O 0040001 4 000 440 T
751 OVERTIME BASE & PRE.	COAC MAINTENIANCE MACHINIST (Se	ncl Exp KE10H Indust/Site Srvs Steelworkers	1.38645 [SYS 061300] 1.386448 - Target Linear 0.87 Hour
Factors 1.74 h	0.3612 May 2000 Earned Va		Linear 0.871Hour
1.74	0.3012 May 2000 Earned Va	alue Factor	1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (in	ncl Exp KE10H Indust/Site Srvs Steelworkers	Linear 0.18 Hour
Factors 0.35 h	0.3612 May 2000 Earned Va		211001
			1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (in	ncl Exp KE10H Indust/Site Srvs Steelworkers	Linear 1.05 Hour
Factors 2.09 h	0.3612 May 2000 Earned Va	alue Factor	
		T	1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear 1.05 Hour
Factors 2.09 h	0.3612 May 2000 Earned Va	alue Factor	1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear 1.79 Hour
Factors 3.57 h	0.3612 May 2000 Earned Va		Linear 1.7 Spriour
dieters dieters	0.0012		1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear 0.70 Hour
Factors 1.39 h	0.3612 May 2000 Earned Va	alue Factor	
			1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS		Linear 3.61 Hour
Factors 7.2 h	0.3612 May 2000 Earned Va	alue Factor	4 000 45 10 10 00 004 000 14 000 110 7
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	S KE10H Indust/Site Srvs Steelworkers	1.38645 [SYS 061300] 1.386448 - Target Linear 0.57 Hour
751 OVERTIME BASE & PRE.	0.3612 May 2000 Earned Va		Linear U.5/IHour
actors 1.13 II	0.3012 Way 2000 Earried Va	alue i actor	1.38645 ISYS 0613001 1.386448 - Target
751 OVERTIME BASE & PRE.	C090 STRUCTURAL AND METAL WO	ORKE KE10H Indust/Site Srvs Steelworkers	Linear 1.54 Hour
Factors 3.08 h	0.3612 May 2000 Earned Va		
			1.38645 ISYS 0613001 1.386448 - Target
A5C SUPPLIES	0000 NONE	C210S Facilities Momt & Maintenance	Linear 2.795.13 Dolla
Factors 1.015 FY00 Escalation	5499.01 d	0.3612 May 2000 Earned Value Factor	
			1.38645 [SYS 061300] 1.386448 - Target

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

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Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Activity Filter

Baseline Devl 1EFB

Starts In FY

·Approximately 11 preventative maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$24.18 average in this cluster

UUnit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99 Basis for adjustment - None.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50% Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

s	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.95	Hours
Factors	3.89 h		0.3612 May 2000 Earned Value Fac	ctor				
						1.38645 [SYS 06130	01 1.386448 - Ta	arget
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.46	Hours
Factors	2.92 h		0.3612 May 2000 Earned Value Fac	ctor				
						1.38645 [SYS 06130	01 1.386448 - Ta	arget
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.22	Hours
Factors	0.44 h		0.3612 May 2000 Earned Value Fac	ctor				
						1.38645 [SYS 06130	01 1.386448 - Ta	arget
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.10	Hours
Factors	0.19 h		0.3612 May 2000 Earned Value Fac	ctor				
						1.38645 [SYS 06130	01 1.386448 - Ta	arget
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.08	Hours
Factors	0.15 h		0.3612 May 2000 Earned Value Fac	ctor				
						1.38645 [SYS 06130	01 1.386448 - Ta	arget
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.01	Hours
Factors	0.02 h		0.3612 May 2000 Earned Value Fac	ctor				
						1.38645 [SYS 06130	01 1.386448 - Ta	arget
A5C	SUPPLIES	0000	NONE	C210S	Facilities Momt & Maintenance	Linear	14.44	Dollars
Factors	28.4 d		1.015 FY00 Escalation		0.3612 May 2000 Earned Value Factor			

Line Item 3a - Preventive maintenance

1.38645 [SYS 061300] 1.386448 - Target

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster

in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 557 preventative maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filter

Baseline Devl 1EFB

Starts In FY *

1.38645 [SYS 061300] 1.386448 - Target

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$135.15 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 96% of the FY 99

budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficency return.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50% Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es		Cost Element		Skill			Department	Curve	Ouantity	Units
	750	STRAIGHT TIME BASE	C020	ELECTRICIANS		KE10H	Indust/Site Srvs Steelworkers	Linear	551.31	Hours
Fe	actors	1100.9 h		0.3612 May 2000 Ear	ned Value Fact	tor				
								1.38645 [SYS 061300	01 1.386448 - Ta	arget
	750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHIN	IIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	413.48	Hours
Fe	actors	825.67 h		0.3612 May 2000 Ear	ned Value Fact	tor				
								1.38645 [SYS 061300	01 1.386448 - Ta	arget
	750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFI	ITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	63.09	Hours
Fa	actors	125.98 h		0.3612 May 2000 Ear	ned Value Fact	tor				
_								1.38645 [SYS 061300	01 1.386448 - Ta	araet
	751	OVERTIME BASE & PRE.	C020	ELECTRICIANS		KE10H	Indust/Site Srvs Steelworkers	Linear	27.56	Hours
Fa	actors	55.04 h		0.3612 May 2000 Ear	ned Value Fact	tor				
_								1.38645 [SYS 061300	01 1.386448 - Ta	araet
	751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHIN	IIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	20.67	Hours
Fa	actors	41.28 h		0.3612 May 2000 Ear	ned Value Fact	tor				
_								1.38645 [SYS 061300	01 1.386448 - Ta	araet
	751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFI	ITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.15	Hours
Fe	actors	6.3 h		0.3612 May 2000 Ear	ned Value Fact	tor				
_								1.38645 [SYS 061300	01 1.386448 - Ta	araet
	A5C S	SUPPLIES	0000	NONE		C210S	Facilities Momt & Maintenance	Linear	4.089.00	Dollars
Fe	actors	1.015 FY00 Escalation		8044.51 d			0.3612 May 2000 Earned Value Factor			

Line Item 3b - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

Approximately 107 preventative maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filter

Baseline Devl 1EFB

Starts In FY *

Units - Work Packages

Unit Cost - \$53.44 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. This year is based on executing the same level of effort as in FY 99.

Revised number of work orders - none

Basis for adjustment - none.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50% Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

3	Cost Element		Skill	Department	Curve	Ouantity Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	41.88 Hours
Factors	s 83.62 h		0.3612 May 2000 Earned Value Fac	ctor		
					1.38645 [SYS 06130	01 1.386448 - Target
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear	31.40 Hours
Factors	s 62.71 h		0.3612 May 2000 Earned Value Fac	ctor		
					1.38645 [SYS 06130	01 1.386448 - Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	4.79 Hours
Factors	s 9.57 h		0.3612 May 2000 Earned Value Fac	ctor		
					1.38645 [SYS 06130	01 1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	2.09 Hours
Factors	s 4.18 h		0.3612 Mary 2000 Earned Value Fa	actor		
					1.38645 [SYS 06130	01 1.386448 - Target
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear	1.57 Hours
Factors	s 3.14 h		0.3612 May 2000 Earned Value Fac	ctor		
					1.38645 [SYS 06130	01 1.386448 - Target
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	0.24 Hours
Factors	s 0.48 h		0.3612 May 2000 Earned Value Fac	ctor		
					1.38645 [SYS 06130	01 1.386448 - Target
A5C	SUPPLIES	0000	NONE	C210S Facilities Momt & Maintenance	Linear	310.57 Dollars
Factors	1.015 FY00 Escalation		611 d	0.3612 May 2000 Earned Value Factor		

Pascription: 551 Cluster Landlord Functions EV01

1.38645 [SYS 061300] 1.386448 - Target

2 Caladala Diala

ACTIVITY ID: TEF	Description: 551 Cluster Landiord Functi	ons, Froi						Cost Risk	2 Scheaule F	ilsk i		
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
1	Corrective maintenance	1.00	each	HC	40	40	865	231	0	1.095	412	1.508
1a	Corrective maintenance	0.96	each	HC	11.365	10.911	235.313	62.741	0	298.053	112.244	410.298
1b	Corrective maintenance	1.00	each	HC	863	863	18.618	4.964	0	23.581	8.881	32.462
3	Preventive maintenance	1.00	each	HC	7	7	148	26	0	174	71	245
3a	Preventive maintenance	0.96	each	HC	1.917	1.840	40.325	6.971	0	47.296	19.235	66.531
3b	Preventive maintenance	1.00	each	HC	146	146	3.191	552	0	3.742	1.522	5.264
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	27.313	27.313	0	27.313
	To	tal for Activ	ity 1EFB010	0:		13.806	298.458	75.483	27.313	401.255	142.365	543.619

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

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Cont Dial

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filter

Baseline Devl 1EFB

Starts In FY *

·Approximately 5 corrective/routine maintenance work actions are expected. Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98 Item Desc - Fiscal Year Corrective Maintenance Breakdown of Data: Item - Corrective maintenance Units - Work Packages Unit Cost - \$327 average for this cluster Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99 Basis for adjustment - None. The percentage of maintenance effort (labor Type) is as follows: Carpenter 15.38% Electrician 30.77% (includes Linemen) Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62% Stationary Operating Engineer 1.54% This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

s	Cost Element	Skill	Department	Curve	Ouantity Units
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	2.60 Hours
Facto	<i>rs</i> 2.92 h				
_				0.88934 [SYS 06140	01 .88934200 - Svstem
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	2.81 Hours
Facto	<i>rs</i> 3.16 h				
				0.88934 [SYS 06140	01 .88934200 - Svstem
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	1.73 Hours
Facto	<i>rs</i> 1.94 h				
_				0.88934 [SYS 06140	01 .88934200 - Svstem
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	3.74 Hours
Facto	<i>rs</i> 4.21 h				
_				0.88934 [SYS 06140	01 .88934200 - Svstem
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	4.18 Hours
Facto	<i>rs</i> 4.7 h				
				0.88934 [SYS 06140	01 .88934200 - Svstem
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	3.58 Hours
Facto	<i>rs</i> 4.02 h				
				0.88934 [SYS 06140	01 .88934200 - Svstem
750		C040 MAINTENANCE MACHINIST (i	incl Exp KD10H 776 Complex Steelworkers	Linear	1.73 Hours
Facto	<i>rs</i> 1.94 h				
				0.88934 [SYS 06140	
750		C040 MAINTENANCE MACHINIST (i	incl Exp KE10H Indust/Site Srvs Steelworkers	Linear	0.28 Hours
Facto	<i>rs</i> 0.32 h				
					01 .88934200 - Svstem
750		C040 MAINTENANCE MACHINIST (i	incl Exp KE10H Indust/Site Srvs Steelworkers	Linear	1.44 Hours
Facto	<i>rs</i> 1.62 h				
_					01 .88934200 - Svstem
750		C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	2.95 Hours
Facto	<i>rs</i> 3.32 h				
_					01 .88934200 - Svstem
750		C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	1.73 Hours
Facto	<i>rs</i> 1.94 h				
				0.88934 [SYS 06140	01 .88934200 - Svstem

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Ba
WBS Filter 1E
Activity Filter *

Baseline Devl 1EFB

1EFB0100	Baseline Cost a	nd Basis of Estimate	WBS Filter 1EFB Activity Filter *	Starts In FY *
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworke		1.16 Hours
Factors 1.3 h			0.00024 ISVS	0614001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworke		0.93 Hours
Factors 1.05 h	1 0000 II EUNIDEINO AND I II EI II I EINO	TAL TOTA THROUGHOUTE OF VS ORCHWOTE	ord Enreal	0.331110413
				0614001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworke	ers Linear	5.96 Hours
Factors 6.7 h			0.00024 [6V6.0	0614001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL WORKE	KE10H Indust/Site Srvs Steelworke		2.54 Hours
Factors 2.86 h				
				0614001 .88934200 - Svstem
750 STRAIGHT TIME BASE Factors 0.97 h	R070 WASTE TREATMENT OPERATOR A	KE10H Indust/Site Srvs Steelworke	ers Linear	0.86 Hours
<i>raciors</i> 0.97 II			0.88934 [SYS]	0614001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworke		0.09 Hours
Factors 0.1 h				
TEL OVERTIME DAGE & DDE	OCAO CARRENTERO	VE4011 1 1 1/0" 0 0 1 1 1		0614001 .88934200 - Svstem
751 OVERTIME BASE & PRE. Factors 0.15 h	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworke	ers Linear	0.13lHours
140075 0.13 11			0.88934 [SYS]	0614001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworke		0.14 Hours
Factors 0.16 h				
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworke		061400] .88934200 - System 0.18 Hours
Factors 0.2 h	COZO ILLECTRICIANO	RETUIT IIIIddst/Site Sivs Steelworke	Elifeai	0.10 10015
			0.88934 [SYS	061400] .88934200 - System
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworke	ers Linear	0.20 Hours
Factors 0.23 h			0.00024 [CVC	061400] .88934200 - System
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworke		0.19 Hours
Factors 0.21 h	1 0020 1220 11100 1110			
				0614001 .88934200 - Svstem
751 OVERTIME BASE & PRE. Factors 0.08 h	C040 MAINTENANCE MACHINIST (incl Exp	KD10H 776 Complex Steelworkers	Linear	0.07 Hours
Factors 0.08 h			0.88934 [SYS)	0614001 .88934200 - System
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworke		0.09 Hours
Factors 0.1 h				
754 OVERTIME BASE & BBE	OO 40 MAINTENANOE MACHINIOT (* 1.5	WE4011 1 1/0" 0 0 1 1		0614001 .88934200 - Svstem
751 OVERTIME BASE & PRE. Factors 0.02 h	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworke	ers Linear	0.02 Hours
<i>Taciors</i> 0.02 II			0.88934 [SYS]	0614001 .88934200 - System
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworke		0.09 Hours
Factors 0.1 h				
754 OVEDTIME DAGE & DDE	C070 PAINTERS	IZEAOLI Indust/Cita Crus Ctachuarles		0614001 .88934200 - Svstem 0.15 Hours
751 OVERTIME BASE & PRE. Factors 0.17 h	I CU/U IPAINTERS	KE10H Indust/Site Srvs Steelworke	ers Linear	U.TSIMOUIS
V.17 11			0.88934 [SYS	0614001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworke	ers Linear	0.29 Hours
Factors 0.33 h			0.00004 501/0	004 4001 0000 4000 0
			0.88934 ISYS	061400] .88934200 - System

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WBS No: 1EFB04 1EFB0100 Activity ID:

Rocky Flats Closure Project

Baseline Devl Proiect WBS Filter 1FFR

121 80 100		Baseline Cost an	d Basis	of Estimate	Activity Filter	*	Starts In FY *
751 OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	5	Linear	0.05 Hours
Factors 0.06 h							
		_				0.88934 [SYS 061400	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	3	Linear	0.04 Hours
Factors 0.05 h							
						0.88934 [SYS 061400	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	3	Linear	0.12 Hours
Factors 0.14 h							
						0.88934 [SYS 061400	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	3	Linear	0.04 Hours
Factors 0.05 h							
						0.88934 [SYS 061400	01 .88934200 - Svstem
A5C SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenand	ce	Linear	230.75 Dollars
Factors 255.63 d		1.015 FY00 Escalation					

0.88934 [SYS 061400] .88934200 - System

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 752 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Line Item 1a - Corrective maintenance

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$615.72 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 96% of the FY 99

budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficency return.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 32.31% (includes Linemen)

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

s	Cost Element		Skill	Department	Curve	Ouantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KD10H 776 Complex Steelworkers	Linear	489.54	Hours
Factors	550.45 h						
					0.88934 [SYS 061400	01 .88934200 - 3	System
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	734.30	Hours
Factors	825.67 h						
_					0.88934 [SYS 061400	01 .88934200 - 3	System
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	795.53	Hours
Factors	894.51 h						
	-		:	· · · · · · · · · · · · · · · · · · ·	0.88934 [SYS 061400	01 .88934200 - 3	Svstem

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Units

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Ba
WBS Filter 1E
Activity Filter *

Baseline Devl 1EFB

1EFB0100	Baseline Cost ar	าd Basis	of Estimate	WBS Filter Activity Filter	1EFB *	Starts In FY *
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KD10H	776 Complex Steelworkers	Activity Pitter	Linear	1.060.66 Hours
Factors 1192.64 h					0.00004 100/0.004	4001 00004000 0 4
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H	Indust/Site Srvs Steelworker	c	0.88934 ISYS 061 Linear	4001 .88934200 - System 1.013.02 Hours
Factors 1139.07 h	1 0020 IEEEOTMOJANO	_ KE IVII	IIIIdds/Olle Olvs SteelWorker	3	Lilleal	1.013.021110013
	T		T			4001 .88934200 - Svstem
750 STRAIGHT TIME BASE Factors 275.22 h	C020 ELECTRICIANS	KE10H	Indust/Site Srvs Steelworker	S	Linear	244.76 Hours
Factors 275.22 h					0.88934 [SYS 061	4001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H	Indust/Site Srvs Steelworker	S	Linear	1.182.91 Hours
Factors 1330.1 h					0.00004 100/0.004	4001 00004000 0 4
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworker	S	0.88934 ISYS 061	4001 .88934200 - System 407.95 Hours
Factors 458.71 h						
	00.40 144.0/55144.0/0000000000000000000000000000000000	1/5 (0) 1	1 1 1/01/ 0 0: 1 1			4001 .88934200 - System
750 STRAIGHT TIME BASE Factors 91.74 h	C040 MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworker	S	Linear	81.59 Hours
Fuciors 91.74 II					0.88934 [SYS 061	4001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworker	S	Linear	489.54 Hours
Factors 550.45 h						
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H	Indust/Site Srvs Steelworker	<u> </u>	0.88934 ISYS 061 Linear	4001 .88934200 - System 836.22 Hours
Factors 940.27 h	1 0070 JI MINI ENO	INLION	Industrone or vs otechworker	3	Linear	000.22 110013
			T			400] .88934200 - System
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H	Indust/Site Srvs Steelworker	S	Linear	489.54 Hours
Factors 550.45 h					0.88934 [SVS.061	400] .88934200 - System
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworker	S	Linear	265.10 Hours
Factors 298.08 h						
750 OTDAIGUT TIME DAGE	COOO DI LIMPEDO AND DIDEFITTEDO	KEAOLI	la dust/Oits On a Ots short			400] .88934200 - System 326.36 Hours
750 STRAIGHT TIME BASE Factors 366.97 h	C080 PLUMBERS AND PIPEFITTERS	LKE10H	Indust/Site Srvs Steelworker	S	Linear	326.36IHours
1 400.57					0.88934 [SYS 061	4001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworker	S	Linear	1.686.42 Hours
Factors 1896.26 h					0.00004 (0)/0.004	4001 0000 4000 0 4
750 STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworker	e e	0.88934 ISYS 061	4001 .88934200 - System 720.70 Hours
Factors 810.37 h	1 COSO ISTRUCTORAL AND WETAL WORKE	I IXE IVII	IIIIdds/Olle Olvs SteelWorker	3	Lilleal	720.701110013
					0.88934 [SYS 061	4001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H	Indust/Site Srvs Steelworker	S	Linear	39.78 Hours
Factors 44.73 h					0.80891 1676 061	4001 .88934200 - System
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H	Indust/Site Srvs Steelworker		Linear	36.71 Hours
Factors 41.28 h						
			1			4001 .88934200 - Svstem
751 OVERTIME BASE & PRE. Factors 27.52 h	C010 CARPENTERS	⊥KE10H	Indust/Site Srvs Steelworker	S	Linear	24.47 Hours
Factors 27.52 h					0.88934 ISYS 061	4001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H	Indust/Site Srvs Steelworker	S	Linear	53.03 Hours
Factors 59.63 h						
					0.88934 [SYS 061	400] .88934200 - System

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl 1EFB

	Daseille Cost	Activ	ity Filter *	Starts In FY *
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	59.14 Hours
Factors 66.5 h				
			0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	50.65 Hours
Factors 56.95 h			0.00004 100/0.00440	01 00004000 0 4
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srys Steelworkers	0.88934 ISYS 06140 Linear	01 .88934200 - Svstem 12.24 Hours
Factors 13.76 h	1 CO20 IEEECTRICIANS	RETOT IIIIdust/Site Sivs Steetworkers	Lilleal	12.241110013
1 40013 13.70 11			0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl E)	xp KE10H Indust/Site Srvs Steelworkers	Linear	4.08 Hours
Factors 4.59 h				
				01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl E)	xp KE10H Indust/Site Srvs Steelworkers	Linear	24.47 Hours
Factors 27.52 h			0.8024 1575.06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl E)	vn KE10H Indust/Site Stys Steelworkers	0.86934 1513 06140 Linear	20.40 Hours
Factors 22.94 h		NO NETOTI III GUSVOICE SIVS SICCIWOTICIS	Linear	20.701110413
			0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	24.47 Hours
Factors 27.52 h				
	T			01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	41.81 Hours
Factors 47.01 h			0.8024 1575.06140	0] .88934200 - System
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	0.86934 1313 06140 Linear	84.32 Hours
Factors 94.81 h	1 0000 II EDINIDENO AND I II ETTITENO	TRETOTT IMICUSTORIC STVS SIGELWORKERS	Linear	04.02 110013
1 40000			0.88934 [SYS 06140	0] .88934200 - System
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	16.32 Hours
Factors 18.35 h				
				0] .88934200 - System
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	13.25 Hours
Factors 14.9 h			0.00024 10000 00440	01 000034000 Cuete
751 OVERTIME BASE & PRE.	C090 STRUCTURAL AND METAL WORK	F KE10H Indust/Site Style Steelworkers	0.88934 ISYS 06140 Linear	01 .88934200 - Svstem 36.04 Hours
Factors 40.52 h	1 COSO ISTRUCTORAL AND WE TAL WORK	L ILLIOIT IIIIUUSVOILE SIVS SLEEIWOIKEIS	Lilical	30.0411 10015
1 40.02 11			0.88934 [SYS 06140	01 .88934200 - Svstem
A5C SUPPLIES	0000 NONE	C210S Facilities Momt & Maintenance	Linear	65.354.71 Dollars
<i>Factors</i> 72400.6 d	1.015 FY00 Escalation			

Line Item 1b - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 74 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$475.24 average for this cluster

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0.88934 [SYS 061400] .88934200 - System

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Baseline Devl WBS Filter 1EFB Activity Filter *

Starts In FY *

Unit Adjustment factor - FY99 is used as a base year. This year is based on executing the same level of effort as in FY 99. Revised number of work orders - none

Basis for adjustment - none.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 32.31 Linemen)

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es		Cost Element	Skill		Department	Curve	Quantity	Units
Ĺ	750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	55.77	Hours
	Factors	62.71 h						
						0.88934 [SYS 06140	001 .88934200 - \$	Svstem
Ĺ	750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	37.18	Hours
	Factors	41.81 h						
г		T	T T		T	0.88934 ISYS 06140		
L	750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	60.42	Hours
	Factors	67.94 h						
Г						0.88934 ISYS 06140		
L	750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	89.84	Hours
	Factors	101.02 h						_
Г		T	T I		T	0.88934 [SYS 06140		
L	750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	76.94	Hours
	Factors	86.51 h						•
ſ		0TD 4 10 1 T T 14 F D 4 0 F	0000 51 50501010	1/5 / 61 /	1 1 1/21 2 2 1	0.88934 [SYS 06140		
L	750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	80.56	Hours
	Factors	90.58 h				0.00004 10000.00444	201 00004000 (0
ſ	750	STRAIGHT TIME BASE	C020 ELECTRICIANS	VE10U	Indust/Site Srvs Steelworkers	0.88934 ISYS 06140 Linear		Hours
Ļ	Factors	20.9 h	CU20 ELECTRICIANS	KETUH	indusi/Site Sivs Steelworkers	Linear	16.59	Houis
	raciors	20.9				0.88934 [SYS 06140	UUI 880343UU 9	Systom
ſ	750	STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Ex	n KE10H	Indust/Site Says Steelworkers	U.00934 1313 00140		Hours
Ļ	Factors	6.97 h	1 CO40 INIAINTENAINCE MACHINIST (IIICI EZ	W I ILL IOII	illidusvoite Sivs Steelworkers	Lilledi	0.20	illouis
	ruciors	0.97				0.88934 [SYS 06140	nni 88934200 - 9	System
ſ	750	STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Ex	n KF10H	Indust/Site Srys Steelworkers	Linear		Hours
	Factors	41.81 h		W IXE OI	III GOOD ON O OLO OLO OLO OLO OLO OLO OLO OLO OL	Entoa	07.10	, i louio
	1 delors					0.88934 [SYS 06140	001 .88934200 - 9	System
	750	STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Ex	φ KE10H	Indust/Site Srvs Steelworkers	Linear		Hours
	Factors	34.84 h						
_						0.88934 ISYS 06140	001 .88934200 - \$	Svstem
	750	STRAIGHT TIME BASE	C070 PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	37.18	Hours
	Factors	41.81 h						
						0.88934 [SYS 06140	001 .88934200 - \$	Svstem
Į	750	STRAIGHT TIME BASE	C070 PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	63.52	Hours
	Factors	71.42 h						
r		T				0.88934 [SYS 06140	001 .88934200 - \$	Svstem
L	750	STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	24.79	Hours
	Factors	27.87 h						
-						0.88934 [SYS 06140	001 .88934200 - \$	Svstem

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WBS No: 1EFB04 1EFB0100 Activity ID:

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter 1E
Activity Filter *

Baseline Devl 1EFB

1EFB0100	Baseline Cost and Basis of Estimate WBS Filter Activity Fi	
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers	Linear 128.09 Hours
Factors 144.03 h		0.00004 [CVC.004400] 00004000 Cvct
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400] .88934200 - System Linear 20.13 Hours
Factors 22.64 h	1 000 11 201102110 11 21 11 21 11 11 11 11 11 11 11 11 11	
750 STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL WORKE KE10H Indust/Site Srvs Steelworkers	0.88934
750 STRAIGHT TIME BASE Factors 61.55 h	1 CU90 ISTRUCTURAL AND METAL WORKE RETURN INDUST/SITE STVS STEELWORKETS	Linear 54.74lHours
		0.88934 [SYS 0614001 .88934200 - System
751 OVERTIME BASE & PRE.	C010 CARPENTERS KE10H Indust/Site Srvs Steelworkers	Linear 1.86 Hours
factors 2.09 h		0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C010 CARPENTERS KE10H Indust/Site Srvs Steelworkers	Linear 3.02 Hours
Factors 3.4 h		
751 OVERTIME BASE & PRE.	C010 CARPENTERS KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400] .88934200 - System Linear 2.79 Hours
Factors 3.14 h	T COTO ICANTENTENS	Lineal 2.73ii louis
		0.88934 [SYS 0614001.88934200 - System
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS KE10H Indust/Site Srvs Steelworkers	Linear 4.03 Hours
Factors 4.53 h		0.88934 ISYS 0614001 88934200 - System
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS KE10H Indust/Site Srvs Steelworkers	Linear 0.93 Hours
Factors 1.05 h		
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400] .88934200 - System Linear 3.85 Hours
Factors 4.33 h	CO20 ELECTRICIANS RETOIT III dust/Site Sivs Sieel workers	Linear 3.03[riouis
		0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS KE10H Indust/Site Srvs Steelworkers	Linear 4.49 Hours
Factors 5.05 h		0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers	Linear 1.55 Hours
Factors 1.74 h		
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400] .88934200 - System Linear 0.31 Hours
Factors 0.35 h	1 CO40 IMMINITENANCE IMACHINIST TITIC EXD RETOIT IIII CUSVOILE SIVS SIEE WORKES	Lineal U.STII louis
1		0.88934 [SYS 0614001.88934200 - System
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers	Linear 1.86 Hours
Factors 2.09 h		0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C070 PAINTERS KE10H Indust/Site Srvs Steelworkers	Linear 1.86 Hours
Factors 2.09 h		
751 OVERTIME BASE & PRE.	C070 PAINTERS KE10H Indust/Site Srvs Steelworkers	0.88934
Factors 3.57 h	T COTO II MINTENO I NE TON IIII MUUSVOILE SIVS SIEEIWOIKEIS	Lilical 3.1/IROUIS
		0.88934 [SYS 0614001.88934200 - System
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers	Linear 1.00 Hours
Factors 1.13 h		0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers	Linear 1.24 Hours
Factors 1.39 h		
		0.88934 [SYS 061400] .88934200 - System

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Baseline Devl WBS Filter 1EFB

		Baseline Cost an	ia Basis	Activity F	ilter	k	Starts In FY *
751 OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers		Linear	6.40 Hours
Factors 7.2 h							
						0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers		Linear	2.74 Hours
Factors 3.08 h							
						0.88934 [SYS 06140	01 .88934200 - Svstem
A5C SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance		Linear	4.963.86 Dollars
Factors 1.015 FY00 Escalation		5499.01 d					

Line Item 3 - Preventive maintenance

0.88934 [SYS 061400] .88934200 - System

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

Approximately 11 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98
Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$24.18 average in this cluster

UUnit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99 Basis for adjustment - None.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50%

Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

s	Cost Element	Cost Element Skill			Department	Curve	Ouantity	Units
7	50 STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.46 F	lours
Fac	tors 3.89 h							
_		ı				0.88934 [SYS 0614	001 .88934200 - S	vstem
_7	50 STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	2.60 ⊦	lours
Fac	tors 2.92 h							
		1				0.88934 [SYS 0614	001 .88934200 - S	vstem
7	50 STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.39 H	lours
Fac	<i>tors</i> 0.44 h							
		1				0.88934 [SYS 0614	001 .88934200 - S	vstem
_7	51 OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.17 H	lours
Fac	tors 0.19 h							
		1				0.88934 [SYS 0614		
_7	51 OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.13lF	lours
Fac	tors 0.15 h							
		ı				0.88934 [SYS 0614		
_7	51 OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.02	lours
Fac	tors 0.02 h							
						0.88934 [SYS 0614	<u>001 .88934200 - S</u>	vstem

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Activity Filter Baseline Devl 1EFB

> Starts In FY 25.64 Dollars Linear

A5C SUPPLIES 0000 NONE Factors 28.4 1.015 -- FY00 Escalation --

Line Item 3a - Preventive maintenance

0.88934 [SYS 061400] .88934200 - System

0.88934 [SYS 061400] .88934200 - System

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site

maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

C210S Facilities Momt & Maintenance

·Approximately 557 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$135.15 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 96% of the FY 99

budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficency return.

The percentage of maintenance effort (labor Type) required is as follows:

50.00% (includes Linemen) Electrician

Maint. Mech 37.50% Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

3	Cost Element		Skill		Department	Curve	Ouantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	979.08	Hours
Factors	1100.9 h							
		1			1	0.88934 [SYS 06140	01 .88934200 - S	Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	734.30	Hours
Factors	825.67 h							
_						0.88934 [SYS 06140	01 .88934200 - \$	Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	112.04	Hours
Factors	125.98 h							
						0.88934 [SYS 06140	01 .88934200 - \$	System
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	48.95	Hours
Factors	55.04 h							
						0.88934 [SYS 06140	01 .88934200 - \$	System
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	36.71	Hours
Factors	41.28 h							
						0.88934 [SYS 06140	01 .88934200 - 9	System
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.60	Hours
Factors	6.3 h							
						0.88934 ISYS 06140	01 .88934200 - \$	System
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	7.261.64	Dollars
Factors	8044.51 d		1.015 FY00 Escalation					

Line Item 3b - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter

1EFB

Activity Filter Starts In FY

Units

Baseline Devl

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 107 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$53.44 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. This year is based on executing the same level of effort as in FY 99.

Revised number of work orders - none

Basis for adjustment - none.

The percentage of maintenance effort (labor Type) required is as follows:

50.00% (includes Linemen) Electrician

Cost Element

Maint. Mech 37.50%

Pipefitter 12 50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

ASE C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	r 74.37 Hours
				0.88934 [S	SYS 0614001 .88934200 - System
ASE C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	r 55.77 Hours
			T	0.88934 [S	SYS 0614001 .88934200 - System
ASE C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	r 8.51 Hours
			T	0.88934 [S	SYS 0614001 .88934200 - System
PRE. C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	r 3.72 Hours
			T	0.88934 [S	SYS 0614001 .88934200 - System
PRE. C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	r 2.79 Hours
<u>_</u>				0.88934 [S	SYS 0614001 .88934200 - System
PRE. C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	r 0.43 Hours
			T	0.88934 [S	SYS 0614001 88934200 - System
0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	r 551.54 Dollars
Escalation	611 d				
				0.88934 [S	SYS 0614001 .88934200 - System
	ASE C040 ASE C080 APRE. C020 A PRE. C040 A PRE. C080	ASE C040 MAINTENANCE MACHINIST (incl Exp. ASE C080 PLUMBERS AND PIPEFITTERS A PRE. C020 ELECTRICIANS A PRE. C040 MAINTENANCE MACHINIST (incl Exp. A PRE. C080 PLUMBERS AND PIPEFITTERS 0000 NONE	ASE C040 MAINTENANCE MACHINIST (incl Exp KE10H ASE C080 PLUMBERS AND PIPEFITTERS KE10H A PRE. C020 ELECTRICIANS KE10H A PRE. C040 MAINTENANCE MACHINIST (incl Exp KE10H A PRE. C080 PLUMBERS AND PIPEFITTERS KE10H O000 NONE C210S	ASE C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers ASE C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers A PRE. C020 ELECTRICIANS KE10H Indust/Site Srvs Steelworkers A PRE. C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers A PRE. C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers A PRE. C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers C080 NONE C210S Facilities Mamt & Maintenance	0.88934 SASE

Department

Line Item SYS - Contingency And Escalation

BOE

Resources

es		Cost Element		Skill		Department	Curve	Ouantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	16.455.94	Dollars
_	Factors	16455.9 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	10.856.77	Dollars

10856.8 Dollars

Activity ID: 1EFB0105 Description: 551 Cluster Landlord Functions, FY02

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2 Schedule Risk

Cost Risk

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter

Baseline Devl 1EFB

	Substitute State of Learning								Activity Filter *			
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
1	Corrective maintenance	1.00	each	HC	40	40	865	231	0	1.095	305	1.400
1a	Corrective maintenance	0.96	each	HC	11.365	10.911	235.313	62.741	0	298.053	83.065	381.119
1b	Corrective maintenance	1.00	each	HC	863	863	18.618	4.964	0	23.581	6.572	30.153
3	Preventive maintenance	1.00	each	HC	7	7	148	26	0	174	52	226
3a	Preventive maintenance	0.96	each	HC	1.917	1.840	40.325	6.971	0	47.296	14.235	61.530
3b	Preventive maintenance	1.00	each	HC	146	146	3.191	552	0	3.742	1.126	4.868
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	71.453	71.453	0	71.453
	То	tal for Activi	ty 1EFB010	5:		13.806	298.458	75.483	71.453	445.395	105.356	550.751

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 5 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$327 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99 Basis for adjustment - None.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 30.77% (includes Linemen)

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08%

Metal Worker 4.62%

Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es	Cost Element		Skill		Department	Curve	Ouantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.81	Hours
Factors	3.16 h							
				,		0.88934 [SYS 061400	01 .88934200 - \$	Svstem
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.73	Hours
Factors	1.94 h							
						0.88934 [SYS 06140]	01 .88934200 - \$	Svstem
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.60	Hours
Factors	2.92 h							
						0.88934 [SYS 06140]	01 .88934200 - \$	Svstem
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.18	Hours
Factors	4.7 h							
				,		0.88934 ISYS 061400	01 .88934200 - \$	System
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.58	Hours
Factors	4.02 h							
	·				·	0.88934 [SYS 061400	01 .88934200 - \$	Svstem

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filte

Baseline Devl 1EFB *

		Activity Fi	lter * Starts In FY *
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 3.74 Hours
Factors 4.21 h			
			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (ir	ncl Exp KE10H Indust/Site Srvs Steelworkers	Linear 1.44 Hours
Factors 1.62 h			0.88934
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (ir	ncl Exp KE10H Indust/Site Srvs Steelworkers	Linear 1.73 Hours
Factors 1.94 h			
TEO OTDAIGUIT TIME DAGE	OO40 MAINTENANOE MACHINIOT (ncl Exp KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE Factors 0.32 h	1 C040 IMAINTENANCE MACHINIST (II	nci Exd KE10H lindust/Site Srvs Steelworkers	Linear 0.28 Hours
raciors 0.32 II			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear 2.95 Hours
Factors 3.32 h			
			0.88934 [SYS 061400] .88934200 - Svstem
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear 1.73 Hours
Factors 1.94 h			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	S KE10H Indust/Site Srvs Steelworkers	Linear 0.93 Hours
Factors 1.05 h			
			0.88934 [SYS 0614001.88934200 - System
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	S KE10H Indust/Site Srvs Steelworkers	Linear 5.96 Hours
Factors 6.7 h			0.00024 [CVC 004400] 0.0024200 Cvctom
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	S KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400] .88934200 - System Linear 1.16 Hours
Factors 1.3 h	TOOG ILEMBERO 7 WE THE EITHER	- TALTOTT IMIGGOVORO CITO CLOSIWOTROTO	Elifodi 1. Toji lodio
			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL W	ORKE KE10H Indust/Site Srvs Steelworkers	Linear 2.54 Hours
Factors 2.86 h			0.00004 [0)/0.004400] 00004000 0
750 STRAIGHT TIME BASE	R070 WASTE TREATMENT OPERAT	TOR A KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400] .88934200 - System Linear 0.86 Hours
Factors 0.97 h	T NOTO IWASTE TREATMENT OF ENA	TOTA INE TOTA IIII dust/oite oi vs Steetworkers	Lineal 0.00ii louis
			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 0.13 Hours
Factors 0.15 h			
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srys Steelworkers	0.88934
Factors 0.16 h	CUIU ICARPENTERS	RETURN IIII MUSI/Site SIVS Steelworkers	Linear 0.141Hours
0.10			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 0.09 Hours
Factors 0.1 h			
	Local El FOTDIOLANO	1/5/01/ 1 1 1/01/ 0 0 1 1	0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 0.18 Hours
ruciois U.Z II			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 0.19 Hours
Factors 0.21 h			
			0.88934 ISYS 0614001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 0.20 Hours
Factors 0.23 h			0.88934 [SYS 061400] .88934200 - System
			0.00304 10 10 00 1400 00304200 - System

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl 1EFB

	Baseline Cost ar	nd Basis of Estimate	Activity Filter *	Starts In FY *
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworke	rs Linear	0.09 Hours
Factors 0.1 h				
				001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworke	rs Linear	0.02 Hours
Factors 0.02 h			0.00004 100/0.0044	201 2000 4000 0 4
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Says Steelworks		001 .88934200 - Svstem 0.07 Hours
Factors 0.08 h	1 C040 IIVIAINTENANCE WACHINIST WIICIESD	RETORT IIIIdust/Site SIVS SteetWorke	is Lilleal	0.071110015
140073 0.00 11			0.88934 [SYS 0614	001 .88934200 - System
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworke	rs Linear	0.09 Hours
Factors 0.1 h				
				001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworke	rs Linear	0.15 Hours
Factors 0.17 h			0.00004 100/0.0044	201 2000 4000 0 4
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworke		001 .88934200 - Svstem 0.05 Hours
Factors 0.06 h	1 C000 IFLUIVIBERS AND FIFEFITIERS	RETURN IIII III III III III III III III III	is Lilledi	U.USIHUUIS
1 461073 0.00 11			0.88934 [SYS 0614	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworke		0.04 Hours
Factors 0.05 h				
				001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworke	rs Linear	0.29 Hours
Factors 0.33 h			0.00034 [CVC.06444	00] .88934200 - System
751 OVERTIME BASE & PRE.	C090 STRUCTURAL AND METAL WORKE	KE10H Indust/Site Says Steelworks		0.12 Hours
Factors 0.14 h	1 COSO ISTRUCTORAL AND METAL WORKE	RETOTI IIIdasi/Oile Oilys Steelworke	Linear	0.12 110013
			0.88934 [SYS 0614	00] .88934200 - System
751 OVERTIME BASE & PRE.	R070 WASTE TREATMENT OPERATOR A	KE10H Indust/Site Srvs Steelworke	rs Linear	0.04 Hours
Factors 0.05 h				
				001 .88934200 - System
A5C SUPPLIES	0000 NONE	C210S Facilities Mamt & Maintenar	nce Linear	230.75 Dollars
<i>Factors</i> 255.63 d	1.015 FY00 Escalation		0.00004 10000.00444	001 00004000 Cumt
			0.88934 (SYS 0614)	001 .88934200 - System

Line Item 1a - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 752 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$615.72 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 96% of the FY 99 budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficency return.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

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Activity ID: 1EFB0105

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Activity Filter

Baseline Devl 1EFB

Starts In FY *

Electrician 32.31% (includes Linemen)
Maint. Mech 13.85%

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

1EFB04

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

WBS No:

	Cost Element	Skill		Department	Curve	Ouantity Unit:
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	734.30 Hours
Factors	825.67 h					
					0.88934 [SYS 06140	01 .88934200 - Svstem
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	489.54 Hours
Factors	550.45 h					
					0.88934 [SYS 06140	01 .88934200 - Svstem
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	795.53 Hours
Factors	894.51 h					
					0.88934 [SYS 06140	01 .88934200 - Svstem
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.060.66 Hours
Factors	1192.64 h					
					0.88934 [SYS 06140	01 .88934200 - Svstem
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.013.02 Hours
Factors	1139.07 h					
					0.88934 [SYS 06140	
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	244.76 Hours
Factors	275.22 h					
					0.88934 [SYS 06140	0] .88934200 - System
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	1,182.91 Hours
Factors	1330.1 h					
					0.88934 [SYS 06140	
750	STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (in	ncl Exp KE10H	Indust/Site Srvs Steelworkers	Linear	407.95 Hours
Factors	458.71 h					
			1		0.88934 [SYS 06140	
750	STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (ir	ncl Exp KE10H	Indust/Site Srvs Steelworkers	Linear	81.59 Hours
Factors	91.74 h					
					0.88934 [SYS 06140	
750	STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (ir	ncl Exp KE10H	Indust/Site Srvs Steelworkers	Linear	489.54 Hours
Factors	550.45 h					
					0.88934 [SYS 06140	
750	STRAIGHT TIME BASE	C070 PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	836.22 Hours
Factors	940.27 h					
					0.88934 [SYS 06140	
	STRAIGHT TIME BASE	C070 PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	489.54 Hours
Factors	550.45 h					
					0.88934 [SYS 06140	
	STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	S KE10H	Indust/Site Srvs Steelworkers	Linear	265.10 Hours
Factors	298.08 h					
					0.88934 [SYS 06140	
	STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	S KE10H	Indust/Site Srvs Steelworkers	Linear	326.36 Hours
Factors	366.97 h					
					0.88934 [SYS 06140	
	STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	S KE10H	Indust/Site Srvs Steelworkers	Linear	1.686.42 Hours
Factors	1896.26 h					
					0.88934 [SYS 06140	

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filte

Baseline Devl 1EFB *

	Activity Fi	ilter * Starts In FY *
C090 STRUCTURAL AND METAL WORKE		Linear 720.70 Hours
		0.88934 [SYS 061400] .88934200 - System
C010 CARPENTERS	KD10H 776 Complex Steelworkers	Linear 39.78 Hours
		0.00004 [0)/0.004400] 00004000 0
CO10 CARPENTERS	KE10H Indust/Site Stys Steelworkers	0.88934 [SYS 061400] .88934200 - System Linear 36.71 Hours
T VOTO TO/ANI ENTERNO	TETOTI IIII MARKO ONO OTVO ONO OTVO	EIIIONI VV.7 III IONIV
		0.88934 [SYS 0614001.88934200 - System
C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 24.47 Hours
COSO ELECTRICIANO	I/E4011 Indust/Cite Crue Steelwarkers	0.88934 [SYS 0614001 .88934200 - System Linear 59.14 Hours
I CUZU IELECTRICIANS	RETUR TITIQUS//Site SIVS Steetworkers	Lineal 59.14inouis
		0.88934 [SYS 061400] .88934200 - System
C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 53.03 Hours
		0.88934 [SYS 061400] .88934200 - System
I C020 IELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 12.24 Hours
		0.88934 [SYS 061400] .88934200 - System
C020 ELECTRICIANS	KE10H Indust/Site Srys Steelworkers	Linear 50.65 Hours
		0.88934 [SYS 061400] .88934200 - System
C040 MAINTENANCE MACHINIST (incl Ex	p KE10H Indust/Site Srvs Steelworkers	Linear 4.08 Hours
		0.00004 100/0.0044001 00004000 0
CO40 MAINTENANCE MACHINIST (incl Ex	n KE10H Indust/Site Style Steelworkers	0.88934 [SYS 061400] .88934200 - System Linear 24.47 Hours
CO40 IMAINTENANCE WACHINIST (IIICI EX	p RETOTT IIIdust/Site Sivs Steelworkers	Lineal 24.47 ji louis
		0.88934 [SYS 061400] .88934200 - System
C040 MAINTENANCE MACHINIST (incl Ex	p KE10H Indust/Site Srvs Steelworkers	Linear 20.40 Hours
COZO DAINITEDO	IVEAULT In direct/Oite Corne Ote aboundary	0.88934 [SYS 061400] .88934200 - System Linear 24.47 Hours
CU/U IPAINTERS	RETUR lindust/Site Srvs Steelworkers	Linear 24.4/IHours
		0.88934 [SYS 061400] .88934200 - System
C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear 41.81 Hours
		0.88934 [SYS 061400] .88934200 - Svstem
C080 IPLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear 84.32 Hours
		0.88934 [SYS 0614001.88934200 - System
C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Stys Steelworkers	Linear 16.32lHours
	The Total Hinduconic State State Inches	EIIIOAI IOAG
		0.88934 ISYS 0614001 .88934200 - System
C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear 13.25 Hours
OSS OTRUCTURAL AND METAL WORK	- 1/5/01 1 1/0" 0 0 1 1 1	0.88934 [SYS 061400] .88934200 - System
C090 STRUCTURAL AND METAL WORKE	E KE10H Indust/Site Srvs Steelworkers	Linear 36.04 Hours
	C010 CARPENTERS C010 CARPENTERS C010 CARPENTERS C010 CARPENTERS C020 ELECTRICIANS C020 ELECTRICIANS C020 ELECTRICIANS C020 ELECTRICIANS C040 MAINTENANCE MACHINIST (incl Extended to the company of the company	C010 CARPENTERS KE10H Indust/Site Srvs Steelworkers C010 CARPENTERS KE10H Indust/Site Srvs Steelworkers C020 ELECTRICIANS KE10H Indust/Site Srvs Steelworkers C020 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers C040 PAINTERS KE10H Indust/Site Srvs Steelworkers C070 PAINTERS KE10H Indust/Site Srvs Steelworkers C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers

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1EFB04 1EFB0105 Activity ID:

A5C SUPPLIES

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter

1EFB

Baseline Devl

Starts In FY 65.354.71 Dollars Linear

0000 NONE Factors 72400.6 d 1.015 -- FY00 Escalation --

Line Item 1b - Corrective maintenance

0.88934 [SYS 061400] .88934200 - System

BOE

WBS No:

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

C210S Facilities Momt & Maintenance

·Approximately 74 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$475.24 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. This year is based on executing the same level of effort as in FY 99.

Revised number of work orders - none

Basis for adjustment - none.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 32.31 Linemen)

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Ouantity Units
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	60.42 Hours
Factors 67.94 h				
			0.88934 [SYS 0614	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	37.18 Hours
Factors 41.81 h				
			0.88934 [SYS 0614	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	55.77 Hours
Factors 62.71 h				
			0.88934 [SYS 0614	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	76.94 Hours
Factors 86.51 h				
	T T		0.88934 [SYS 0614	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	89.84 Hours
Factors 101.02 h				
	T T		0.88934 [SYS 0614	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	80.56 Hours
Factors 90.58 h				
			0.88934 [SYS 0614	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	18.59 Hours
Factors 20.9 h				
			0.88934 ISYS 0614	001 .88934200 - Svstem

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Ba
WBS Filter 1E
Activity Filter *

Baseline Devl 1EFB

1EFB0105	Baseline Cost ar	nd Basis of Estimate	WBS Filter 1EFB Activity Filter *	Starts In FY *
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelwork		6.20 Hours
Factors 6.97 h				
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Styre Steelworks		614001 .88934200 - Svstem 37.18 Hours
Factors 41.81 h	1 C040 IMAINTENANCE MACHINIST (IIICI EXD	RETURN IIIIdus//Site Sivs Steelwork	ers Linear	37.TOITIOUIS
				614001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelwork	ers Linear	30.98 Hours
Factors 34.84 h			0.00034 1575 06	614001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelwork		63.52 Hours
Factors 71.42 h				
	0070 04447500	1/5/01/ 1 / //01/ 0 0 / / /		314001 .88934200 - System
750 STRAIGHT TIME BASE Factors 41.81 h	C070 PAINTERS	KE10H Indust/Site Srvs Steelwork	ers Linear	37.18 Hours
41.01 11			0.88934 [SYS 06	614001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwork	ers Linear	20.13 Hours
Factors 22.64 h				
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwork		314001 .88934200 - Svstem 128.09 Hours
Factors 144.03 h	1 COOU IFLOWIDENS AND FIFEI II TENS	TETOTE IIIIdus//Site Sivs Steelwork	eis Lilieai	120.091110015
			0.88934 ISYS 06	614001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworke	ers Linear	24.79 Hours
Factors 27.87 h			0.8684 1668 0	61400] .88934200 - System
750 STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL WORKE	KE10H Indust/Site Srvs Steelwork		54.74 Hours
Factors 61.55 h				
		1		61400] .88934200 - System
751 OVERTIME BASE & PRE. Factors 2.09 h	C010 CARPENTERS	KE10H Indust/Site Srvs Steelwork	ers Linear	1.86 Hours
raciors 2.09 II			0.88934 [SYS 06	61400] .88934200 - System
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelwork		3.02 Hours
Factors 3.4 h				
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelwork		614001 .88934200 - Svstem 2.79 Hours
Factors 3.14 h	1 COTO ICANI LIVILINO	TILL TOTA IIII GUSVOITE OTVS STEETWOLK	Lilleat	2.7 311 10013
		1		314001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwork	ers Linear	4.49 Hours
Factors 5.05 h			0.88934 1975.06	614001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworke		0.93 Hours
Factors 1.05 h				
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwork		3.85 Hours
Factors 4.33 h	I CO20 IELECTRICIANS	RETURN IIII MUSI/SILE SIVS SLEEIWORK	ers I Linear	3.00III0UIS
			0.88934 ISYS 06	314001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwork	ers Linear	4.03 Hours
Factors 4.53 h			0.00004 101/0.00	24.4001.0002.4000
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp.	KE10H Indust/Site Stys Steelworks		614001 .88934200 - Svstem 1.86 Hours
Factors 2.09 h	, SOTO INVALENTATION INVOLVENION (IIICI EXD	TALLIOT IIIIGGSUOITE OIVS OLEEIWOIN	Lineal	1.001110015
			0.88934 [SYS 06	31400] .88934200 - System

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Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl 1EFB

0.88934 [SYS 061400] .88934200 - System

1E1 B0 103	Baseline Cost a	nd Basis of Estimate	Activity Filter	*	Starts In FY *
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelwork		Linear	0.31 Hours
Factors 0.35 h					
				0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelwork	ers	Linear	1.55 Hours
Factors 1.74 h					
				0.88934 [SYS 06140	
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelwork	ers	Linear	1.86 Hours
Factors 2.09 h					
				0.88934 [SYS 06140	
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelwork	ers	Linear	3.17 Hours
Factors 3.57 h					
				0.88934 [SYS 06140	
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwork	ers	Linear	1.24 Hours
Factors 1.39 h					
				0.88934 [SYS 06140	
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwork	ers	Linear	1.00lHours
Factors 1.13 h					
				0.88934 [SYS 06140	
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwork	ers	Linear	6.40 Hours
Factors 7.2 h					
				0.88934 [SYS 06140	
751 OVERTIME BASE & PRE.	C090 STRUCTURAL AND METAL WORKE	KE10H Indust/Site Srvs Steelwork	ers	Linear	2.74 Hours
Factors 3.08 h					
				0.88934 [SYS 06140	
A5C SUPPLIES	0000 NONE	C210S Facilities Mgmt & Mainten	ance	Linear	4,963.86 Dollars
Factors 1.015 FY00 Escalation	- 5499.01 d				

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 11 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$24.18 average in this cluster

UUnit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99 Basis for adjustment - None.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50%

Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources Cost Element Skill Department Curve Quantity Units

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl 1EFB

			Baseline Cost an	a Basis	of Estimate	Activity Filter *		Starts In FY *
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	3	Linear	3.46 Hours
Factors	3.89 h							
		_				1	0.88934 [SYS 06140	01 .88934200 - Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	3	Linear	2.60 Hours
Factors	2.92 h							
							0.88934 [SYS 06140	01 .88934200 - Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	3	Linear	0.39 Hours
Factors	0.44 h							
							0.88934 [SYS 06140	01 .88934200 - Svstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	3	Linear	0.17 Hours
Factors	0.19 h							
							0.88934 [SYS 06140	01 .88934200 - Svstem
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	3	Linear	0.13 Hours
Factors	0.15 h							
							0.88934 [SYS 06140	01 .88934200 - Svstem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	5	Linear	0.02 Hours
Factors	0.02 h							
							0.88934 [SYS 06140	01 .88934200 - Svstem
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenand	e	Linear	25.64 Dollars
Factors	28.4 d		1.015 FY00 Escalation					

Line Item 3a - Preventive maintenance

0.88934 [SYS 061400] .88934200 - System

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 557 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$135.15 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 96% of the FY 99 budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficency return.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50% Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es		Cost Element		Skill		Department	Curve	Ouantity Units	
L	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	979.08 Hours	
Ì	Factors	1100.9 h							
_							0.88934 [SYS 06140	001 .88934200 - Svstem	
L	750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	734.30 Hours	
Ì	Factors	825.67 h							
							0.88934 ISYS 06140	001 88934200 - System	

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter

Baseline Devl 1EFB

		Baseline Cost a	nd Basis	of Estimate Activity Fi	lter *		Starts In FY *
750 STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers		Linear	112.04 Hours
Factors 125.98 h							
			1		,	0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers		Linear	48.95 Hours
Factors 55.04 h							
			1		,	0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers		Linear	36.71 Hours
Factors 41.28 h							
					ı	0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers		Linear	5.60 Hours
Factors 6.3 h							
					ı	0.88934 [SYS 06140	01 .88934200 - Svstem
A5C SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance		Linear	7.261.64 Dollars
<i>Factors</i> 8044.51 d		1.015 FY00 Escalation					
						0.88934 [SYS 06140	01 .88934200 - System

Line Item 3b - Preventive maintenance

BOE

Preventive maintenance

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to

corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 107 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$53.44 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. This year is based on executing the same level of effort as in FY 99.

Revised number of work orders - none

Basis for adjustment - none.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50%

Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity Units						
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	74.37 Hours						
Factors 83.62 h										
			0.88934 [SYS 06140	001 .88934200 - Svstem						
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (in	ncl Exp KE10H Indust/Site Srvs Steelworkers	Linear	55.77 Hours						
Factors 62.71 h										
			0.88934 [SYS 06140	001 .88934200 - Svstem						
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTER	S KE10H Indust/Site Srvs Steelworkers	Linear	8.51 Hours						
Factors 9.57 h										
			0.88934 [SYS 06140	001 .88934200 - Svstem						
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	3.72 Hours						
Factors 4.18 h										
			0.88934 [SYS 06140	001 .88934200 - System						

Rocky Flats Closure Project Rasaline Cost and Rasis of Estimate

Proiect WBS Filter

1EFB

Baseline Devl

		Daseille Cost all	ilu basis di Estilliate	Activity Filter	*	Starts In FY *
751 OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers		Linear	2.79 Hours
Factors 3.14 h						
					0.88934 [SYS 06140	01 .88934200 - System
751 OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	;	Linear	0.43 Hours
Factors 0.48 h						
					0.88934 [SYS 06140	01 .88934200 - Svstem
A5C SUPPLIES	0000	NONE	C210S Facilities Mgmt & Maintenance	e	Linear	551.54 Dollars
Factors 1.015 FY00 Escalation		611 d				

0.88934 [SYS 061400] .88934200 - System

Line Item SYS - Contingency And Escalation

BOE

Resources

es	Skill Skill					Department	Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	49.054.63	Dollars
_	Factors	49054.6 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	22.398.27	Dollars

Factors 22398.3 Dollars

Description: 551 Cluster Landlord Functions EY03

2 Schedule Risk

ACTIVITY ID. TEI	Description. 331 Gluster Landiolu I d		Cost Risk 2 Schedule Risk									
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
1	Corrective maintenance	1.00	each	HC	40	40	865	231	0	1.095	299	1.394
1a	Corrective maintenance	0.96	each	HC	11.365	10.911	235.313	62.741	0	298.053	81.418	379.472
1b	Corrective maintenance	0.10	each	HC	863	86	1.862	496	0	2.358	644	3.002
3	Preventive maintenance	1.00	each	HC	7	7	148	26	0	174	51	225
3a	Preventive maintenance	0.96	each	HC	1.917	1.840	40.325	6.971	0	47.296	13.952	61.248
3b	Preventive maintenance	0.10	each	HC	146	15	319	55	0	374	110	485
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	123.295	123.295	0	123.295
		Total for Activi	tv 1EFB0110):		12.899	278.831	70.520	123,295	472.645	96.476	569.121

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 5 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$327 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99 Basis for adjustment - None.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 30.77% (includes Linemen)

Maint. Mech 13.85% Painter 10.77%

Pipefitter 23.08% Metal Worker 4.62%

Stationary Operating Engineer 1.54%

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl 1EFB

Activity Filter * Starts In FY *

s		Cost Ele	ement	Skill	Department	Curve	Ouantity Units
L	750	STRAIGHT TIME	E BASE C010	CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	2.81 Hours
1	Factors	3.16 h					
Г				T		0.88934 [SYS 06140	01 .88934200 - Svstem
L	750	STRAIGHT TIME	E BASE I C010	CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	1.73 Hours
-	Factors	1.94 h				0.88934 [SYS 06140	01 99034200 Systom
Γ	750	STRAIGHT TIME	BASE C010	CARPENTERS	KE10H Indust/Site Srvs Steelworkers	U.00934 1313 06140	2.60 Hours
	Factors	2.92 h	_ D/\0L	TO/AIXI EIVIEIXO	NETOTI III INGGVOICE OF VS OCCUMENTOS	Linear	2.001110013
_						0.88934 [SYS 06140	01 .88934200 - Svstem
L	750	STRAIGHT TIME	BASE C020	ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	4.18 Hours
i	Factors	4.7 h					
Г		070410117714	- 5.4.5	EL ESTRICIANIS	145.01.	0.88934 [SYS 06140	
L		STRAIGHT TIME	BASE I C020	ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	3.58 Hours
-	Factors	4.02 h				0.88934 [SYS 06140	01 8803/200 - Systom
ſ	750	STRAIGHT TIME	BASE C020	ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	U.00934 1313 06140	3.74 Hours
i	Factors	4.21 h	1 0020	THE STATE OF THE S	TE TO THE MAN COLOR OF THE CHAPTER OF THE COLOR OF THE CO	, Sell IMMI	o.r milouis
_						0.88934 [SYS 06140	01 .88934200 - Svstem
L	750	STRAIGHT TIME	BASE C040	MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear	1.44 Hours
1	Factors	1.62 h					
Г				T		0.88934 [SYS 06140	01 .88934200 - Svstem
L	750	STRAIGHT TIME	E BASE C040	MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear	1.73 Hours
1	Factors	1.94 h				0.88934 [SYS 06140	01 99034200 Systom
Γ	750	STRAIGHT TIME	BASE C040	MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srys Steelworkers	U.88934 1313 00140	0.28 Hours
-	Factors	0.32 h	_ D/\0L	INVALIGITATION TO THE PROPERTY OF THE PROPERTY	TETOTT III GUSTORO OTVS OLCOWOTIONS	Linear	0.20 10013
						0.88934 [SYS 06140	01 .88934200 - Svstem
	750	STRAIGHT TIME	E BASE C070	PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	2.95 Hours
i	Factors	3.32 h					
Г						0.88934 [SYS 06140	
L		STRAIGHT TIME	E BASE C070	PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	1.73 Hours
-	Factors	1.94 h				0.00004 100/0 00440	01 00004000 0
Γ	750	STRAIGHT TIME	BASE CORO	PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 06140 Linear	0.93 Hours
L	Factors	1.05 h	_ D/ NOL 1 CUOU	II LOWIDENO AND CIFELITIENS	TETOTI IIIIQQSVOICE OLYS OCCCIWOLICIS	Lilical	O.BOII IIUUIS
						0.88934 [SYS 06140	01 .88934200 - System
	750	STRAIGHT TIME	BASE C080	PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	5.96 Hours
1	Factors	6.7 h					
_			Ţ	1		0.88934 [SYS 06140	
L	750	STRAIGHT TIME	EBASE C080	PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	1.16 Hours
1	Factors	1.3 h				0.00001 101/0.55	21 00004002 2
Г	750	CTD A ICUIT TIME	- DAGE 0000	STRUCTURAL AND METAL WORKE	IVEAULT to disable to the control of	0.88934 [SYS 06140	01 .88934200 - Svstem 2.54 Hours
L	750	STRAIGHT TIME 2.86 h	E BASE I CU9U	ISTRUCTURAL AND METAL WORKE	KETUH IIndust/Site Srvs Steelworkers	Linear	2.54IHOUIS
-	Factors	2.00 []				0.88934 [SYS 06140	01 88934200 - Svetem
Γ	750	STRAIGHT TIME	E BASE R070	WASTE TREATMENT OPERATOR A	KE10H Indust/Site Srvs Steelworkers	U.88934 1313 00140	0.86 Hours
i	Factors	0.97 h			The state of the s	, Sell IMMI	3.00H 10413
				<u></u>		0.88934 [SYS 06140	01 .88934200 - Svstem
- 1	751	OVERTIME BAS	SE & PRE. C010	CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	0.13 Hours

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WBS No: 1EFB04 Activity ID:

1EFB0110

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Activity Filter Baseline Devl 1EFB

Starts In FY *

		Activity Fi	lter ^	Starts In FY
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	0.14 Hours
Factors 0.16 h			0.00004 (0)/0.0044	001 00004000 0 4
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers		001 .88934200 - Svstem 0.09 Hours
751 OVERTIME BASE & PRE. Factors 0.1 h	1 COTO ICARPENTERS	RETURN IIII III III III III III III III III	Linear	U.U9IHOUIS
				001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	0.18 Hours
Factors 0.2 h			0.88934 [SYS.0614	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	0.19 Hours
Factors 0.21 h				
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	0.88934 ISYS 0614 Linear	001 .88934200 - Svstem 0.20 Hours
Factors 0.23 h	1 6020 ILLECTIVICIANO	TILL TOTT IIII III III III III III III III I	Linear	0.201110013
				001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (inc	Exp KE10H Indust/Site Srvs Steelworkers	Linear	0.09 Hours
Factors 0.1 h			0.88934 [SYS.0614	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (inc	Exp KE10H Indust/Site Srvs Steelworkers	Linear	0.07 Hours
Factors 0.08 h				
751 OVERTIME BASE & PRE.	CO40 MAINTENANCE MACHINIST (inc	Exp KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 0614 Linear	001 .88934200 - Svstem 0.02 Hours
Factors 0.02 h	1 C040 IMAINTENANCE MACHINIST (IIIC	EXP RETUIT IIIdust/Site SIVS Steetworkers	Lilleai	0.02 110015
			0.88934 [SYS 0614	00] .88934200 - System
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	0.09 Hours
Factors 0.1 h			0 88034 [676 0614	00] .88934200 - System
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	0.15 Hours
Factors 0.17 h				
				00] .88934200 - System
751 OVERTIME BASE & PRE. Factors 0.06 h	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	0.05 Hours
raciors 0.00 II			0.88934 [SYS 0614	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	0.04 Hours
Factors 0.05 h			0.00004 [0.000.004.4	001 00004000 Custsus
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 ISYS 0614 Linear	001 .88934200 - Svstem 0.29 Hours
Factors 0.33 h		THE TOTAL INTEGRATION OF THE PROPERTY OF THE P	Linoui	0.201110410
				001 .88934200 - Svstem
751 OVERTIME BASE & PRE. Factors 0.14 h	C090 ISTRUCTURAL AND METAL WO	RKE KE10H Indust/Site Srvs Steelworkers	Linear	0.12 Hours
Factors 0.14 h			0.88934 [SYS.0614	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	R070 WASTE TREATMENT OPERATO	DR A KE10H Indust/Site Srvs Steelworkers	Linear	0.04 Hours
Factors 0.05 h				001 0000 100 - 0
A5C SUPPLIES	0000 NONE	C210S Facilities Mgmt & Maintenance	0.88934 [SYS 0614 Linear	001 .88934200 - Svstem 230.75 Dollars
Factors 255.63 d	1.015 FY00 Escalation	1 02100 II acliities ividint & ividinteriance	Lilical	230.7 SIDUIIdi S
			0.88934 [SYS 0614	001 .88934200 - System

Line Item 1a - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Baseline Devl WBS Filter 1EFB Activity Filter *

Filter * Starts In FY

was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 752 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$615.72 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 96% of the FY 99

budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficency return.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 32.31% (includes Linemen)

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

S	Cost Element	Skill	Department	Curve	Ouantity Units
75	0 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	489.54 Hours
Facto	ors 550.45 h				
				0.88934 [SYS 0614	1001 .88934200 - Svstem
75	0 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	734.30 Hours
Facto	ors 825.67 h				
				0.88934 [SYS 0614	1001 .88934200 - Svstem
75	0 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	795.53 Hours
Facto	ors 894.51 h				
					1001 .88934200 - Svstem
75		C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	244.76lHours
Facto	ors 275.22 h				
		T I			1001 .88934200 - Svstem
75		C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	1.182.91 Hours
Facto	ors 1330.1 h			0.00004 100/0.004	1001 0000 1000 0 1
75	OTDAIGUT TIME DAGE	OCCO ELECTRICIANO	1/54011 I. I. 1/0': 0. 0: 1. I		1001 .88934200 - System
75		C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	1.060.66lHours
Facto	ors 1192.64 h			0.00034 [SVS.0617	1001 .88934200 - Svstem
75	0 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	0.00934 1313 0014 Linear	1.013.02 Hours
Facto		1 CO20 IEEECTRICIANS	NETOT IIIIdds//Site SIVS SteelWorkers	Lilleal	1.013.021110018
1 acre	73 1109.07 11			0.88934 [SVS.061/	1001 .88934200 - Svstem
75	0 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (i	ncl Exp KE10H Indust/Site Srvs Steelworkers	Linear	407.95 Hours
Facto				=0.15561	101100110010
				0.88934 [SYS 0614	1001 .88934200 - Svstem
75	0 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (i	ncl Exp KE10H Indust/Site Srvs Steelworkers	Linear	81.59 Hours
Facto	ors 91.74 h		·	·	· · · · · · · · · · · · · · · · · · ·
				0.88934 ISYS 0614	1001 .88934200 - Svstem
75	0 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (i	ncl Exp KE10H Indust/Site Srvs Steelworkers	Linear	489.54 Hours
Facto	ors 550.45 h				
				0.88934 [SYS 0614	1001 .88934200 - Svstem

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Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Ba
WBS Filter 1E
Activity Filter *

Baseline Devl 1EFB

1EFB0110	Baseline Cost a	and Basis of Estimate	WBS Filter 1EFB Activity Filter *	Starts In FY *
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworke		489.54 Hours
Factors 550.45 h				
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworke		14001 .88934200 - Svstem 836.22 Hours
Factors 940.27 h	1 CO/O IPAINTERS	RETURN IIII III III III III III III III III	ers Ellieai	030.221110015
			0.88934 ISYS 06	14001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworke	ers Linear	265.10 Hours
Factors 298.08 h			0.00004 10000.00	14001 00004000 Ct
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworke		14001 .88934200 - System 326.36 Hours
Factors 366.97 h	1 JOSS II ESIMBERS / MEDITICIO	THE TOTAL INTRODUCTION OF THE STOCK WORK	VIV I EIIIVAI	020.001110410
				14001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworke	ers Linear	1.686.42 Hours
Factors 1896.26 h			30.2421 15088.0	14001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL WORKE	KE10H Indust/Site Srvs Steelwork		720.70 Hours
Factors 810.37 h				
				14001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworke	ers Linear	36.71 Hours
Factors 41.28 h			0.88934 ISYS.06	14001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworke		24.47 Hours
Factors 27.52 h				
TEAL OVERTIME DAGE & DDE	OO40 OARDENTERO	1/5/01/ 1 //07/ 0 0/ 1 /		1400] .88934200 - System
751 OVERTIME BASE & PRE. Factors 44.73 h	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworke	ers Linear	39.78 Hours
Pactors 44.70 II			0.88934 [SYS 06	1400] .88934200 - System
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworks		50.65 Hours
Factors 56.95 h				
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworke		1400] .88934200 - System 12.24 Hours
Factors 13.76 h	1 C020 IELECTRICIANS	RETURN IIII III III III III III III III III	ers Ellieai	12.24INUUIS
			0.88934 ISYS 06	14001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworke	ers Linear	53.03 Hours
Factors 59.63 h			0.00004 16000 0	14001 00004000 Cyatam
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworke		14001 .88934200 - Svstem 59.14 Hours
Factors 66.5 h	1 VOES TELESTINOM NO	THE TOTAL INTRODUCTION OF THE STOCK WORK	VIV I EIIIVAI	00.1 11110010
				14001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Ext) KE10H Indust/Site Srvs Steelworke	ers Linear	24.47 Hours
Factors 27.52 h			30.2421 15088.0	14001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Ext	KE10H Indust/Site Srvs Steelwork		4.08 Hours
Factors 4.59 h				
				14001 .88934200 - Svstem
751 OVERTIME BASE & PRE. Factors 22.94 h	C040 MAINTENANCE MACHINIST (incl Ext		ers Linear	20.40 Hours
Factors 22.94 h			0.88934 ISYS.06	14001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworke		24.47 Hours
Factors 27.52 h				
			0.88934 [SYS 06	1400] .88934200 - System

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Rocky Flats Closure Project

Proiect WBS Filter

Baseline Devl 1EFB

12. 20110		Baseline Cost ar	nd Basis of Estimate	Activity Filter *	Starts In FY *
751 OVERTIME BASE & PRE.	C070	PAINTERS	KE10H Indust/Site Srvs Steelwork		41.81 Hours
Factors 47.01 h				0.88934 ISYS 0	514001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwork	ers Linear	84.32 Hours
Factors 94.81 h				0.88934 ISYS 0	614001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwork	kers Linear	16.32 Hours
Factors 18.35 h	,			0.88934 ISYS 0	614001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwork	kers Linear	13.25 Hours
Factors 14.9 h				0.88934 [SYS 0	614001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H Indust/Site Srvs Steelwork	kers Linear	36.04 Hours
Factors 40.52 h				0.88934 ISYS 0	514001 .88934200 - Svstem
A5C SUPPLIES	0000	NONE	C210S Facilities Mamt & Maintena	ance Linear	65.354.71 Dollars
Factors 72400.6 d		1.015 FY00 Escalation		0.88934 ISYS 0	514001 .88934200 - System

Line Item 1b - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 74 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$475.24 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. This year is based on executing the same level of effort as in FY 99, with the exception of when a facility enters cold shutdown. During cold shutdown the facility maintenance budget is reduced to 10% of the normal budget.

Basis for adjustment - Planning assumption

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 32.31 Linemen)

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity Units
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	60.42 Hours
Factors 67.94 h				
			0.88934 [SYS 06140	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	55.77 Hours
Factors 62.71 h				
			0.88934 [SYS 06140	001 .88934200 - Svstem

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Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filt

Baseline Devl 1EFB

	baseline	Cost and Basis of Estimate Activity Fil	ter * Starts In FY *
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 37.18 Hours
Factors 41.81 h			
750 0704101177775	0000 515075101110	[[[]]]	0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 18.59lHours
Factors 20.9 h			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 80.56lHours
Factors 90.58 h			
			0.88934 [SYS 0614001.88934200 - System
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 76.94 Hours
Factors 86.51 h			
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	0.88934
Factors 101.02 h	1 CU20 IELECTRICIANS	RETURN IIII dust/Site Sivs Steetworkers	Lilledi 69.04inodis
101.02			0.88934
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp KD10H 776 Complex Steelworkers	Linear 37.18 Hours
Factors 41.81 h			
			0.88934 [SYS 061400] .88934200 - Svstem
750 STRAIGHT TIME BASE	C040 IMAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers	Linear 6.20 Hours
Factors 6.97 h			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	CO40 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers	U.86934 15 15 06 14001 .88934200 - System Linear 30.98 Hours
Factors 34.84 h	1 COTO INVINITEIN/NOE W/NOTHINIOT	III EXP TETOT III dust/Oile Oil s diceiworkers	Elifedi 30.30 fodis
			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear 37.18 Hours
Factors 41.81 h			
	L como la unimena	1/5/01/ 1 1/9/ 0 0/ 1 1	0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear 63.52 Hours
Factors 71.42 h			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTER	RS KD10H 776 Complex Steelworkers	Linear 24.79 Hours
Factors 27.87 h			
			0.88934 [SYS 0614001.88934200 - System
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTER	RS KE10H Indust/Site Srvs Steelworkers	Linear 128.09 Hours
Factors 144.03 h			
750 STRAIGHT TIME BASE	COOR DILIMPEDO AND DIDEFITTE	00 VE4011 Indust/Oits Cons Otsahuadasa	0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE Factors 22.64 h	C080 PLUMBERS AND PIPEFITTER	RS KE10H Indust/Site Srvs Steelworkers	Linear 20.13 Hours
<i>Pacions</i> 22.04 II			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL V	VORKE KE10H Indust/Site Srvs Steelworkers	Linear 54.74 Hours
Factors 61.55 h			
	1 1		0.88934
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 2.79 Hours
Factors 3.14 h			0.00004 [0)/0.004400] 00004000 0
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srys Steelworkers	0.88934 [SYS 061400] .88934200 - System Linear 1.86 Hours
751 OVERTIME BASE & PRE. Factors 2.09 h	I CUIU ICARPENTERS	NETUH Indust/Site Sivs Steelworkers	Linear 1.86iHours
1 1111113 2.03 11			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 3.02 Hours
Factors 3.4 h			
			0.88934 [SYS 061400] .88934200 - System

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WBS No: 1EFB04 Activity ID:

1EFB0110

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Activity Filter Baseline Devl 1EFB

TEL BOTTO	Baseline Co	ost and Basis of Estimate Activity Fi	Itar *	Starts In FY *
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	0.93 Hours
Factors 1.05 h				
				001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	4.49 Hours
Factors 5.05 h			0.88934 [SYS.0614	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	3.85 Hours
Factors 4.33 h				
				001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	4.03 Hours
Factors 4.53 h			0.88934 [SYS.0614	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (inc	CLEXP KE10H Indust/Site Srvs Steelworkers	Linear	0.31 Hours
Factors 0.35 h				
	<u> </u>			001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	I C040 IMAINTENANCE MACHINIST (inc	cl Exp KE10H Indust/Site Srvs Steelworkers	Linear	1.55 Hours
Factors 1.74 h			0.88034 [575.0614	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (inc	CLEXD KE10H Indust/Site Srvs Steelworkers	Linear	1.86 Hours
Factors 2.09 h				
				001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	1.86 Hours
Factors 2.09 h			0.88034 [SVS.0614	00] .88934200 - System
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	3.17 Hours
Factors 3.57 h				
			0.88934 [SYS 0614	00] .88934200 - System
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	1.24 Hours
Factors 1.39 h			0.00034 [676.0614	00] .88934200 - System
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	0.86934 1313 0614 Linear	6.40 Hours
Factors 7.2 h	TOO II LOWIDE NO / WO II EI I EI I	TIETOT IIIMMOVOILO OTVO CIGOTTOTICIO	Linoui	U. TOIL TOUTO
			0.88934 [SYS 0614	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	1.00 Hours
Factors 1.13 h			0.00004 [0.000.0	001 00004000 00-4
751 OVERTIME BASE & PRE.	C090 STRUCTURAL AND METAL WC	DRKE KE10H Indust/Site Srvs Steelworkers	0.88934 ISYS 0614 Linear	001 .88934200 - Svstem 2.74 Hours
Factors 3.08 h	1 3330 ISTNOSTONAL AND WETAL WC	TALL TO THINGSHORE ON SOCIETION NEIS	Lilicai	2.7 TII IUUIS
			0.88934 [SYS 0614	001 .88934200 - Svstem
A5C SUPPLIES	0000 NONE	C210S Facilities Mamt & Maintenance	Linear	4.963.86 Dollars
Factors 1.015 FY00 Escalation	5499.01 d			-
			0.88934 [SYS 0614	001 .88934200 - System

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 11 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98 Item Desc - Fiscal Year Preventive Maintenance

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OFFICIAL USE ONLY

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Activity Filter

Baseline Devl 1EFB

Curve

Starts In FY

Quantity

0.88934 [SYS 061400] .88934200 - System

Units

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$24.18 average in this cluster

UUnit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99

Basis for adjustment - None.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Cost Flement

Maint. Mech 37.50% Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

-- FY00 Escalation --

Resources

Skiii	Department	Curve	Quantity Units
C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	3.46 Hours
		0.88934 [SYS 06140	01 .88934200 - Svstem
C040 MAINTENANCE MACHINIST	(incl Exp KE10H Indust/Site Srvs Steelworkers	Linear	2.60 Hours
		0.88934 [SYS 06140	01 .88934200 - Svstem
C080 PLUMBERS AND PIPEFITTE	ERS KE10H Indust/Site Srvs Steelworkers	Linear	0.39 Hours
		0.88934 [SYS 06140	0] .88934200 - System
C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	0.17 Hours
		0.88934 [SYS 06140	0] .88934200 - System
C040 MAINTENANCE MACHINIST	(incl Exp KE10H Indust/Site Srvs Steelworkers	Linear	0.13 Hours
		0.88934 [SYS 06140	0] .88934200 - System
C080 PLUMBERS AND PIPEFITTE	ERS KE10H Indust/Site Srvs Steelworkers	Linear	0.02 Hours
		0.88934 [SYS 06140	01 .88934200 - Svstem
0000 NONE	C210S Facilities Momt & Maintenance	Linear	25.64 Dollars
	C020 ELECTRICIANS C040 MAINTENANCE MACHINIST C080 PLUMBERS AND PIPEFITTE C020 ELECTRICIANS C040 MAINTENANCE MACHINIST C080 PLUMBERS AND PIPEFITTE	C020 ELECTRICIANS KE10H Indust/Site Srvs Steelworkers C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers C020 ELECTRICIANS KE10H Indust/Site Srvs Steelworkers C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers	C020 ELECTRICIANS KE10H Indust/Site Srvs Steelworkers Linear

Department

Factors Line Item 3a - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 557 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

28.4

Unit Cost - \$135.15 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 96% of the FY 99 budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficency return.

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Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Baseline Devl Proiect WBS Filter 1EFB Activity Filter

Starts In FY

0.88934 [SYS 061400] .88934200 - System

The percentage of maintenance effort (labor Type) required is as follows:

50.00% (includes Linemen) Electrician

Maint. Mech 37.50% Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

1 015 -- FY00 Escalation --

Resources

s	Cost Element		Skill		Department	Curve	Ouantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	979.08 ⊢	lours
Factors	1100.9 h							
						0.88934 [SYS 06140	01 .88934200 - Sv	vstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	734.30 ⊢	lours
Factors	825.67 h							
			1		1	0.88934 [SYS 06140	01 .88934200 - Sv	vstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	112.04 H	lours
Factors	125.98 h							
			1			0.88934 [SYS 06140	01 .88934200 - Sv	/stem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	48.95 H	lours
Factors	55.04 h							
					1	0.88934 [SYS 06140	01 .88934200 - Sv	vstem
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KD10H	776 Complex Steelworkers	Linear	36.71 H	lours
Factors	41.28 h							
		1			T	0.88934 [SYS 06140		
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.60 ⊢	lours
Factors	6.3 h							
					1	0.88934 [SYS 06140	01 .88934200 - Sv	vstem
A5C	SUPPLIES	0000	NONE	C210S	Facilities Momt & Maintenance	Linear	7.261.64 D	Oollars

Factors Line Item 3b - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 107 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

8044 51 d

Unit Cost - \$53.44 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. This year is based on executing the same level of effort as in FY 99, with the exception of when a facility enters cold shutdown. During cold shutdown the facility maintenance budget is reduced to 10% of the normal budget.

Basis for adjustment - Planning assumption

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50% Pipefitter 12.50%

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WBS No: 1EFB04 1EFB0110 Activity ID:

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter

Baseline Devl 1EFB

		Baseline Cost ar	1d Basis of Estimate Activity Filter	*	Starts In FY	*	
T.	his estimate includes a project pro	oductivity/efficiency factor for comm	nitted but as yet undefined cost reduction	ns.			
_ =	C . El .	GI-II	ъ		0	TT 1.	1

0.88934 [SYS 061400] .88934200 - System

1

Resources

Cost Element Skill Department C020 ELECTRICIANS 750 STRAIGHT TIME BASE KE10H Indust/Site Srvs Steelworkers Linear 74.37 Hours

83.62 h Factors

0.88934 [SYS 061400] .88934200 - System C040 MAINTENANCE MACHINIST (incl Exp | KE10H | Indust/Site Srvs Steelworkers 750 STRAIGHT TIME BASE Linear 55.77 Hours

Factors 62.71 h

0.88934 [SYS 061400] .88934200 - System 750 STRAIGHT TIME BASE C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers 8.51 Hours Linear 9.57

Factors

0.88934 [SYS 061400] .88934200 - System C020 ELECTRICIANS KE10H Indust/Site Srvs Steelworkers 3.72 Hours 751 OVERTIME BASE & PRE Linear Factors 4 18 h

0.88934 [SYS 061400] .88934200 - System C040 MAINTENANCE MACHINIST (incl Exp | KE10H | Indust/Site Srvs Steelworkers OVERTIME BASE & PRE Linear 2.79 Hours

Factors 314 h

0.88934 [SYS 061400] .88934200 - System OVERTIME BASE & PRE C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers 0.43 Hours 751 Linear Factors 0.48 h

0.88934 [SYS 061400] .88934200 - System A5C SUPPLIES 0000 NONE C210S Facilities Mont & Maintenance 551 54 Dollars Linear

-- FY00 Escalation --Factors 611 1.015

Line Item SYS - Contingency And Escalation

BOE

Cost Element Units Resources Department Curve 0000 NONE CON CONTINGENCY ZDEPT No Department Linear 89.106.29 Dollars Factors 89106.3 Dollars ESC ESCALATION 0000 NONE ZDEPT No Department 34.188.31 Dollars Linear

34188.3 Dollars Factors

Activity ID: 1EFB0115 Description: 551 Cluster Landlord Functions, FY04 Cost Risk 2 Schedule Risk

Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
1	Corrective maintenance	0.10	each	HC	40	4	86	23	0	110	24	134
1b	Corrective maintenance	0.10	each	HC	863	86	1.862	496	0	2.358	525	2.883
3	Preventive maintenance	0.10	each	HC	7	1	15	3	0	17	4	22
3b	Preventive maintenance	0.10	each	HC	146	15	319	55	0	374	90	464
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	499	499	0	499
	Tot	al for Activit	v 1EFB0115	5:		106	2.282	577	499	3.358	644	4.002

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 5 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Baseline Devl WBS Filter 1EFB Activity Filter *

Starts In FY *

Units - Work Packages

Unit Cost - \$327 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99, with the exception of when a facility enters cold shutdown. During cold shutdown the facility maintenance budget is reduced to 10% of the normal budget.

Basis for adjustment - Planning assumption

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 30.77% (includes Linemen)

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

s	Cost Element	Skill	Department	Curve	Ouantity Units
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	2.81 Hours
Factors	3.16 h				
				0.88934 [SYS 0614	00] .88934200 - System
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	1.73 Hours
Factors	1.94 h				
					001 .88934200 - Svstem
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	2.60 Hours
Factors	2.92 h				
					001 .88934200 - Svstem
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	4.18 Hours
Factors	4.7 h				
	T	1	T		001 .88934200 - Svstem
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	3.58 Hours
Factors	4.02 h				
	OTD 4 (0) IT TU 45 D 4 05	0000 51 50751014110	1/5/01/11/19/19 0 0/11/1		001 .88934200 - Svstem
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	3.74 Hours
Factors	4.21 h				
	OTD 4 (0) IT TU 45 D 4 05	0040 1440/751440514407			001 .88934200 - Svstem
750	STRAIGHT TIME BASE	1 C040 IMAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers	Linear	1.44 Hours
Factors	1.62 h			0.00004 10000	1001 00004000
750	STRAIGHT TIME BASE	CO40 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers	0.88934 ISYS 0614 Linear	001 .88934200 - Svstem 1.73 Hours
750		1 C040 IMAINTENANCE MACHINIST (inclexb Ketuh Indust/Site Srvs Steelworkers	Linear	1./3IHours
Factors	1.94 h			0.00024 [6V6.0644	1001 .88934200 - Svstem
750	STRAIGHT TIME BASE	CO40 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers	U.86934 1515 0614	0.28 Hours
Factors		1 C040 IMAINTENANCE MACHINIST	IIICI EXD RETUR IIIQUS//Site SIVS Steelworkers	Lilleal	0.28IFIOUIS
ruciors	0.32			0.88034 [SVS.0614	100] .88934200 - System
750	STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	2.95 Hours
Factors		1 GOTO II MINIERO	TRETOTT IIIIdds/Jolic Orvs Otcciworkers	Linear	2.30110013
1 actors	0.02			0.88934 [SVS.0614	100] .88934200 - System
750	STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	1.73 Hours
Factors		1 0070 II MINIERO	TRETOTT IIIIddd/Olle Oliva Oleelworkera	Linear	1.70110013
1 401013				0.88934 [SYS.0614	100] .88934200 - System
750	STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTER	RS KE10H Indust/Site Srvs Steelworkers	Linear	0.93 Hours
Factors		1 0000 Ji LOMBERO / NOT II EITITEI	TRETOTI INIGGO ONO ONO OLOMONOTO	Linear	0.301110013
1 401013	1.00			0.88934 ISYS 0614	1001 .88934200 - Svstem
	•	•		0.00001 1010 001-	

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Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Ba
WBS Filter 1E
Activity Filter *

Baseline Devl 1EFB

1EFB0115	Baseline Cost ar	nd Basis of Estimate	WBS Filter 1EFB Activity Filter *	Starts In FY *
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwork		5.96 Hours
Factors 6.7 h			0.00024 16V6.064	001 00024200 System
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwork		001 .88934200 - Svstem 1.16 Hours
Factors 1.3 h	TOOS IL COMPETIC / WOLL II ELLI LEIG	THE TOTAL III III MADE ON TO SHOULD IN	UI LIII CAI	1.101110410
		T		001 .88934200 - Svstem
750 STRAIGHT TIME BASE Factors 2.86 h	C090 STRUCTURAL AND METAL WORKE	KE10H Indust/Site Srvs Steelworke	ers Linear	2.54 Hours
Puctors 2.00 II			0.88934 [SYS 0614	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	R070 WASTE TREATMENT OPERATOR A	KE10H Indust/Site Srvs Steelwork		0.86 Hours
Factors 0.97 h			0.00004 10000.004	001 0000 1000 - 0:1
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KD10H 776 Complex Steelworkers		001 .88934200 - Svstem 0.14 Hours
Factors 0.16 h	TOVIO IOMINI ENTERIO			U.T III IOGIO
				001 .88934200 - Svstem
751 OVERTIME BASE & PRE. Factors 0.15 h	C010 CARPENTERS	KE10H Indust/Site Srvs Steelwork	ers Linear	0.13 Hours
<i>Puctors</i> 0.19 II			0.88934 [SYS 0614	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelwork		0.09 Hours
Factors 0.1 h			0.00004 701/0.004	
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwork		001 .88934200 - Svstem 0.18 Hours
Factors 0.2 h	TOTAL PERSONAL PROPERTY OF THE	TIC TOTT IMAGE ONE CIVE CICCIWOTH	oro Emoca	0.10 110010
				00] .88934200 - System
751 OVERTIME BASE & PRE. Factors 0.21 h	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwork	ers Linear	0.19 Hours
ractors 0.21 II			0.88934 [SYS 0614	00] .88934200 - System
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwork		0.20 Hours
Factors 0.23 h			0.00004 701/0.004	
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp.	KE10H Indust/Site Stys Steelworks		00] .88934200 - System 0.09 Hours
Factors 0.1 h	TOTO INVINITE IN LIGHT WITHOUT WITHOUT WITHOUT CAR	TAE TOTT IIII MASSONE SIVS SECTION	CIO LINCAL	0.031110013
	T			001 .88934200 - Svstem
751 OVERTIME BASE & PRE. Factors 0.08 h	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelwork	ers Linear	0.07 Hours
Factors 0.08 h			0.88934 [SYS 0614	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelwork		0.02 Hours
Factors 0.02 h				
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelwork		001 .88934200 - Svstem 0.09 Hours
Factors 0.1 h	T COTO II AINTENS	TILE TOTT IIII III III III III III III III I	eis Lineai	0.091110013
				001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelwork	ers Linear	0.15 Hours
Factors 0.17 h			0.88934 ISVS 0614	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworke		0.05 Hours
Factors 0.06 h				
754 OVERTIME DAGE 9 DDE	CORO DI LIMPEDO AND DIDEFITTESO	KE4011 Indust/Cit- C Ct		001 .88934200 - Svstem
751 OVERTIME BASE & PRE. Factors 0.05 h	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwork	ers Linear	0.04 Hours
0.00			0.88934 [SYS 0614	

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter

Baseline Devl r 1EFB

			Daseille Cost ai	iu Dasis	Activity Filter	*	Starts In FY *
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.29 Hours
Factors	0.33 h						
						0.88934 [SYS 06140	01 .88934200 - Svstem
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	0.12 Hours
Factors	0.14 h						
						0.88934 [SYS 06140	01 .88934200 - Svstem
751	OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	0.04 Hours
Factors	0.05 h						
						0.88934 [SYS 06140	01 .88934200 - Svstem
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	230.75 Dollars
Factors	255.63 d		1.015 FY00 Escalation				

Line Item 1b - Corrective maintenance

0.88934 [SYS 061400] .88934200 - System

Units

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 74 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$475.24 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. This year is based on executing the same level of effort as in FY 99, with the exception of when a facility enters cold shutdown. During cold shutdown the facility maintenance budget is reduced to 10% of the normal budget.

Basis for adjustment - Planning assumption

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 32.31 Linemen)

Cost Element

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	37.18 Hours
Factors 41.81 h				
			0.88934 [SYS 06140	01 .88934200 - Svstem
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	55.77 Hours
Factors 62.71 h				
			0.88934 [SYS 06140	01 .88934200 - Svstem
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	60.42 Hours
Factors 67.94 h				
			0.88934 [SYS 06140	01 .88934200 - Svstem
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	80.56 Hours
Factors 90.58 h				
-			0.88934 [SYS 06140	01 .88934200 - Svstem

Department

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Ba
WBS Filter 1E
Activity Filter *

Baseline Devl 1EFB

1EFB0115	Baseline Cost a	and Basis of Estimate	WBS Filter 1EFB Activity Filter *	Starts In FY *
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwork		76.94 Hours
Factors 86.51 h			0.00004 10000.004	1001 0000 1000 0 1
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwork		1001 .88934200 - Svstem 89.84 Hours
Factors 101.02 h	1 CO20 ILLECTRICIANS	TETOTE IIII III III III III III III III III	eis Lilleai	09.041110015
				1001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwork	ers Linear	18.59 Hours
Factors 20.9 h			0.88934 (SYS 0614	1001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Ext	KE10H Indust/Site Srvs Steelwork	ers Linear	30.98 Hours
Factors 34.84 h				
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Ext	VEAUL Indust/Site Save Steelwerk		1001 .88934200 - Svstem 6.20 Hours
750 STRAIGHT TIME BASE Factors 6.97 h	1 C040 IMAINTENANCE MACHINIST (Incl Ext	D KETUH Indust/Site Srvs Steelwork	ers Linear	6.20IHOURS
0.07				1001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Ext	KE10H Indust/Site Srvs Steelwork	ers Linear	37.18 Hours
Factors 41.81 h			0.00004 10000.004	1001 0000 1000 0
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelwork		1001 .88934200 - Svstem 63.52 Hours
Factors 71.42 h	1 0070 II / MIXI ENO	THE TOTAL INITIALISM ON CONTROL OF THE TOTAL ON CONTROL OF THE TOTAL INITIALISM ON CON		00.021110013
				1001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelwork	ers Linear	37.18 Hours
Factors 41.81 h			0.88934 ISVS 0614	100] .88934200 - System
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwork		128.09 Hours
Factors 144.03 h				
				100] .88934200 - System
750 STRAIGHT TIME BASE Factors 27.87 h	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwork	ers Linear	24.79 Hours
Factors 27.87 h			0.88934 ISYS 0614	100] .88934200 - System
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwork		20.13 Hours
Factors 22.64 h				
750 STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL WORKE	VE10H Indust/Site Says Steelwork		1001 .88934200 - Svstem 54.74 Hours
Factors 61.55 h	1 C090 ISTRUCTORAL AND WETAL WORKE	RETURN IIII III III III III III III III III	ers i Lineai	34./4IFIOUIS
				1001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KD10H 776 Complex Steelworkers	Linear	3.02 Hours
Factors 3.4 h			0.00024 1020000	1001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelwork		2.79 Hours
Factors 3.14 h	. 55.6 157.11 2.11			
				1001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelwork	ers Linear	1.86 Hours
Factors 2.09 h			0.88934 [SYS 0614	1001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KD10H 776 Complex Steelworkers		4.49 Hours
Factors 5.05 h				
754 OVERTIME 2:25 : 225	0000 515075101110	1/540H 1 1/0" 2 2' 1		1001 .88934200 - Svstem
751 OVERTIME BASE & PRE. Factors 4.53 h	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwork	ers Linear	4.03 Hours
raciors 4.33 II			0.88934 [SYS 0614	

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WBS No: Activity ID:

1EFB04 1EFB0115

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl 1EFB

	Baseline Cost	and Basis of Estimate Activity F	ilter *	Starts In FY *
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	0.93 Hours
Factors 1.05 h				
			0.88934 ISYS 06140	
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	3.85 Hours
Factors 4.33 h			0.88934 [SYS 06140	01 00004000 Custom
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Ex	N KE10H Indust/Site Says Steelworkers	0.86934 1515 06140 Linear	1.86 Hours
Factors 2.09 h	T COTO IIVIAINTENANCE WACHING THICLEX	D NETOT IIIdds//Site Sivs Steelworkers	Linear	1.001110013
14075 2.00 11			0.88934 [SYS 06140	01 .88934200 - System
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Ex	xp KE10H Indust/Site Srvs Steelworkers	Linear	0.31 Hours
Factors 0.35 h				
			0.88934 [SYS 06140	
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Ex	to KE10H Indust/Site Srvs Steelworkers	Linear	1.55 Hours
Factors 1.74 h				
754 OVERTIME DAGE & DDE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 06140	01 .88934200 - System 1.86 Hours
751 OVERTIME BASE & PRE. Factors 2.09 h	I CU/U IPAINTERS	KETUH IIndust/Site Srvs Steelworkers	Linear	1.86IHOUIS
Tuctors 2.09 II			0.88934 [SYS 06140	01 88934200 - System
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	3.17 Hours
Factors 3.57 h				
			0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	1.24 Hours
Factors 1.39 h				
754 0)/507145 0405 0 005	OCCO DI LIMPEDO AND DIDEFITTEDO	1/5/011 1 1 1/0% 0 0 1 1	0.88934 [SYS 06140	
751 OVERTIME BASE & PRE. Factors 7.2 h	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	6.40 Hours
raciors 1.2 II			0.88934 [SYS 06140	01 88934200 - System
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	1.00 Hours
Factors 1.13 h	1 0000 - 10000 - 10000	The second secon		1100 110010
-			0.88934 [SYS 06140	0] .88934200 - System
751 OVERTIME BASE & PRE.	C090 STRUCTURAL AND METAL WORKE	KE10H Indust/Site Srvs Steelworkers	Linear	2.74 Hours
Factors 3.08 h				
			0.88934 ISYS 06140	
A5C SUPPLIES	0000 NONE	C210S Facilities Mgmt & Maintenance	Linear	4.963.86 Dollars
Factors 1.015 FY00 Escalation	5499.01 d		0.00004 [0.00.00440	01 00004000 Cuet
			0.88934 [SYS 06140	JI .88934200 - System

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 11 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$24.18 average in this cluster

UUnit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99, with the exception of when a facility enters cold shutdown. During cold shutdown the facility maintenance budget is reduced to 10% of the normal budget.

Basis for adjustment - Planning assumption

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filter

Baseline Devl 1EFB

Starts In FY

0.88934 [SYS 061400] .88934200 - System

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50% Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

s	Cost Element		Skill		Department	Curve	Ouantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KD10H	776 Complex Steelworkers	Linear	3.46	Hours
Factor	s 3.89 h							
		1				0.88934 [SYS 06140	01 .88934200 - 3	Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	2.60	Hours
Factor	s 2.92 h							
	T	1				0.88934 [SYS 06140	01 .88934200 - 3	Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.39	Hours
Factor	s 0.44 h							
					T	0.88934 [SYS 06140	01 .88934200 - 3	Svstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.17	Hours
Factor	s 0.19 h							
						0.88934 [SYS 06140	01 .88934200 - 3	Svstem
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.13	Hours
Factor	s 0.15 h							
		1	1			0.88934 [SYS 06140	01 .88934200 - 3	Svstem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.02	Hours
Factor	s 0.02 h							
						0.88934 [SYS 06140	01 .88934200 - 3	Svstem
A5C	SUPPLIES	0000	NONE	C210S	Facilities Momt & Maintenance	Linear	25.64	Dollars
Factor	s 28.4 d		1.015 FY00 Escalation					

Line Item 3b - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 107 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$53.44 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. This year is based on executing the same level of effort as in FY 99, with the exception of when a facility enters cold shutdown. During cold shutdown the facility maintenance budget is reduced to 10% of the normal budget.

Basis for adjustment - Planning assumption

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50% Pipefitter 12.50%

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl

ilter 1EFB

This sestimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions. Fourth Fourth	Activity ID.	TEL BOTTS		Baseline Co	ost an	d Basis of E	stimate	Acti	vity Filter *	1 0	Sto	erts In FY *	
Factors		This estimate includes a project pr	oductivity/eff:	iciency factor for	comm	itted but a	s yet unde:				576	713 1/1 1	
Factors 83.62 h	Resources	Cost Element		Skill			Departi	ment		Curve	Ou	antity Un	its
15/5 STRAIGHTTIME BASE C040 MAINTENANCE MACHINIST (incl Exo KE10H Indust/Site Sixes Steelworkers Linear 55.7THours		750 STRAIGHT TIME BASE	C020 ELECTR	ICIANS		KE10H Indu	st/Site Srvs St	eelworkers		Linear		74.37 Hour	S
Factors 62.71 h		Factors 83.62 h								0.88934 [SY	S 0614001 .889	34200 - Svste	m
Factors 62.71 h		750 STRAIGHT TIME BASE	C040 MAINTE	NANCE MACHINIST (inc	cl Exp	KE10H Indu	st/Site Srvs St	eelworkers		Linear		55.77 Hour	S
Total OVERTIME BASE & PRE. C020 ELECTRICIANS KE10H Indust/Site Site Site Norkers Linear 3.72 Hours		Factors 62.71 h								0.88934 [SY	S 0614001 .889	34200 - Svster	m
T51 OVERTIME BASE & PRE		750 STRAIGHT TIME BASE	C080 PLUMBE	RS AND PIPEFITTERS		KE10H Indu	st/Site Srvs St	eelworkers					
T51 OVERTIME BASE & PRE. C040 MAINTENANCE MACHINIST (incl Exo KE10H Indust/Site Srvs Steelworkers Linear 3.72 Hours		Factors 9.57 h								0.88934 [SY	S 0614001 .889	34200 - Svste	m
T51 OVERTIME BASE & PRE. C040 MAINTENANCE MACHINIST (incl Exo KE10H Indust/Site Srvs Steelworkers Linear 2.79Hours		751 OVERTIME BASE & PRE.	C020 ELECTR	ICIANS		KE10H Indu	st/Site Srvs St	eelworkers					
Total Overstime Base & Pre. Codo Maintenance Machinist (incl Exo KE10H Indust/Site Srvs Steelworkers Linear 2.79 Hours													
Factors 3.14 h			I I								S 0614001 .889		
151 OVERTIME BASE & PRE. C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srys Steelworkers Linear O.43Hours			I C040 IMAINTE	NANCE MACHINIST (inc	cl Exp	KE10H IIndu	ist/Site Srvs St	eelworkers		Linear		2.79lHour	S
Factors 0.48 N		Factors 3.14 h								0.88934 [SY	S 0614001 .889	34200 - Svste	<u>m</u>
ASC SLIPPLIES 0.000 NONE C210S Facilities Momt & Maintenance Linear 551.54 Dollars		751 OVERTIME BASE & PRE.	C080 PLUMBE	RS AND PIPEFITTERS		KE10H Indu	st/Site Srvs St	eelworkers		Linear		0.43 Hour	S
A5C SUPPLIES 0000 NONE C210S Facilities Mont & Maintenance Linear 551 54 Dollars		Factors 0.48 h								0.88934 [SY	S 0614001 889)34200 - Svstei	m
Factors 1.015 -FY00 Escalation 611 d		A5C SUPPLIES	0000 NONE			C210S Faci	lities Mamt & N	Maintenance					
CON CONTINGENCY 0000 NONE ZDEPT No Department Linear 162.87 Dollars			611	d						0.88934 [SY	S 0614001 .889	34200 - Svste	m
Factors 162.875 Dollars ESC ESCALATION 0000 NONE ZDEPT No Department Linear 336.33 Dollars	Resources	Cost Element		Skill				ment		Curve	$O\nu$	antity Un	its
Factors 162.875 Dollars ESC ESCALATION 0000 NONE ZDEPT No Department Linear 336.33 Dollars		CON CONTINGENCY	0000 NONE			ZDEPT No I	Department			Linear		162.87 Dolla	rs
Second Preventive maintenance 1.00 each HC Total Total		Factors 162.875 Dollars											
Activity ID: 1EXXXB0115 Description: 551 Cluster Landlord Functions, FY05 Cost Risk 2 Schedule Risk 1 Line Item Description Quantity Units BOE Type Labor Hours/Unit Labor Hours Materials/Sub Contingency Contingency Total Prime & Burden Cost Burden Cost Total Cost 1 Corrective maintenance 0.10 each HC 40 4 86 23 0 109 30 139 1b Corrective maintenance 0.10 each HC 863 86 1.854 494 0 2.348 645 2.993 3 Preventive maintenance 0.10 each HC 7 1 15 3 0 17 5 22 3b Preventive maintenance 0.10 each HC 146 14 318 55 0 373 111 483 SYS Contingency And Escalation 1.00 ea EE 0 0 0 0 1.941 1.941 0		ESC ESCALATION	0000 NONE			ZDEPT No I	Department			Linear		336.33 Dolla	rs
Type Hours/Unit Total Cost & Escalation Cost 1 Corrective maintenance 0.10 each HC 40 4 86 23 0 109 30 139 1b Corrective maintenance 0.10 each HC 863 86 1.854 494 0 2.348 645 2.993 3 Preventive maintenance 0.10 each HC 7 1 15 3 0 17 5 22 3b Preventive maintenance 0.10 each HC 146 14 318 55 0 373 111 483 SYS Contingency And Escalation 1.00 ea EE 0 0 0 0 1.941 1.941 0 1.941	Activity ID:		ter Landlord Function	ons, FY05					Cost Risk	2 Schedule R	isk 1		
1 Corrective maintenance 0.10 each HC 40 4 86 23 0 109 30 139 1b Corrective maintenance 0.10 each HC 863 86 1.854 494 0 2.348 645 2.993 3 Preventive maintenance 0.10 each HC 7 1 15 3 0 17 5 22 3b Preventive maintenance 0.10 each HC 146 14 318 55 0 373 111 483 SYS Contingency And Escalation 1.00 ea EE 0 0 0 0 1.941 1.941 0 1.941	Line Item	Description		Quantity Units	-	****				0 2		Burden Cost	Total Cost
1b Corrective maintenance 0.10 each HC 863 86 1.854 494 0 2.348 645 2.993 3 Preventive maintenance 0.10 each HC 7 1 15 3 0 17 5 22 3b Preventive maintenance 0.10 each HC 146 14 318 55 0 373 111 483 SYS Contingency And Escalation 1.00 ea EE 0 0 0 0 1.941 1.941 0 1.941	1	Corrective maintenance		0.10 anah								20	120
3 Preventive maintenance 0.10 each HC 7 1 15 3 0 17 5 22 3b Preventive maintenance 0.10 each HC 146 14 318 55 0 373 111 483 SYS Contingency And Escalation 1.00 ea EE 0 0 0 0 1.941 1.941 0 1.941	1h						-						
3b Preventive maintenance 0.10 each HC 146 14 318 55 0 373 111 483 SYS Contingency And Escalation 1.00 ea EE 0 0 0 0 1.941 1.941 0 1.941	3						1						
SYS Contingency And Escalation 1.00 lea EE 0 0 0 0 1.941 1.941 0 1.941	3h						1/1						
	0.10	- Commoner And Education	Tot				105	2.272	•		4.788	791	5.578

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 5 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Baseline Devl WBS Filter 1EFB

Starts In FY *

Units - Work Packages
Unit Cost - \$327 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99, with the exception of when a facility enters cold shutdown. During cold shutdown the facility maintenance budget is reduced to 10% of the normal budget.

Basis for adjustment - Planning assumption

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 30.77% (includes Linemen)

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

s	Cost Element	Skill	Department	Curve	Ouantity Units
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	2.81 Hours
Factors	3.16 h				
				0.88934 [SYS 0614	100] .88934200 - System
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	1.73 Hours
Factors	1.94 h				
					1001 .88934200 - Svstem
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	2.60 Hours
Factors	2.92 h				
					1001 .88934200 - Svstem
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	4.18 Hours
Factors	4.7 h				
	T	T T			1001 .88934200 - Svstem
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	3.58 Hours
Factors	4.02 h				
	OTD 4 (0) IT TU 45 D 4 05	0000 51 50751014110	1/5/01/ 1 1/01/ 0 0/ 1		1001 .88934200 - Svstem
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	3.74 Hours
Factors	4.21 h				
750	OTD A IOUT TIME DAGE	OO 40 MAINTENANCE MACHINIOT (. 12 1/2/01/ 1 1 1/0// 0 0/ 1 1		1001 .88934200 - Svstem
750	STRAIGHT TIME BASE	1 C040 IMAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers	Linear	1.44 Hours
Factors	1.62 h			0.00004 10000	1001 0000 1000
750	STRAIGHT TIME BASE	CO40 MAINTENANCE MACHINIST	incl Exp KE10H Indust/Site Srvs Steelworkers	0.88934 ISYS 0614 Linear	1.73 Hours
750		1 C040 IMAINTENANCE MACHINIST (inclexb Ketuh Indust/Site Sivs Steelworkers	Linear	1./3IHours
Factors	1.94 h			0.00034 [67/6.0644	1001 .88934200 - Svstem
750	STRAIGHT TIME BASE	CO40 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers	U.88934 ISTS 0614	0.28 Hours
Factors		1 C040 IMAINTENANCE MACHINIST	Inclexb Return lindus/Site Sivs Steelworkers	Linear	0.28iFlours
raciors	0.32			0.88034 [575.0614	100] .88934200 - System
750	STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	0.86934 1313 0014 Linear	2.95 Hours
Factors		COTO FAINTENS	RETOTT IIIdust/Site Sivs Steelworkers	Lilleal	2.93[10018
raciors	3.32 11			0.88934 [575.0614	100] .88934200 - System
750	STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	U.86934 1313 0014	1.73 Hours
Factors		COTO IL AINTERO	NETOTI Illidust/Site Sivs Steelworkers	Lilleai	1.75[10013
raciors	1.04			0.88934 [SVS.0614	100] .88934200 - System
750	STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTER	RS KE10H Indust/Site Srvs Steelworkers	U.86934 1313 0014	0.93 Hours
Factors		1 0000 JI LOWIDLING AND FIFEI II I LI	TO THE TOTAL MINIMANUTE OF AS OLDER WOLKERS	Liliçai	0.330110018
ruciors	1.00			0.88934 [SVS.0614	1001 .88934200 - Svstem
		· · · ·		0.00934 1313 0014	1001 .00334200 - SVStell

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WBS No: 1EFB04 1EXXXB0115 Activity ID:

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter 1E
Activity Filter *

Baseline Devl 1EFB

1EXXXB0115	Raseline Cost and Basis of Estimate	S Filter 1EFB ivity Filter * Starts In FY *
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers	Linear 5.96 Hours
Factors 6.7 h		0.00004 100/0.0044001 00004000 0
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers	0.88934
Factors 1.3 h	1 000 II EMINETO THE ETT LETTE THE TOT III MANUSIN SITU STORMENTO	Ellion I. Iolilonio
TEO OTRAIGUIT TIME RAGE	OCCO OTPUCTUDAL AND METAL WORKE VELOUI I. I. VOY O. O. I. I.	0.88934 ISYS 0614001 .88934200 - System
750 STRAIGHT TIME BASE Factors 2.86 h	C090 STRUCTURAL AND METAL WORKE KE10H Indust/Site Srvs Steelworkers	Linear 2.54 Hours
2.00		0.88934 ISYS 0614001 .88934200 - Svstem
750 STRAIGHT TIME BASE	R070 WASTE TREATMENT OPERATOR A KE10H Indust/Site Srvs Steelworkers	Linear 0.86lHours
Factors 0.97 h		0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C010 CARPENTERS KD10H 776 Complex Steelworkers	Linear 0.14 Hours
Factors 0.16 h		
751 OVERTIME BASE & PRE.	C010 CARPENTERS KE10H Indust/Site Srvs Steelworkers	0.88934
Factors 0.15 h	1 COTO ICANTENTENS NETOTI IIII III III III III III III III II	Linear
		0.88934
751 OVERTIME BASE & PRE.	C010 CARPENTERS KE10H Indust/Site Srvs Steelworkers	Linear 0.09 Hours
Factors 0.1 h		0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS KE10H Indust/Site Srvs Steelworkers	Linear 0.18 Hours
Factors 0.2 h		
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400] .88934200 - System Linear 0.19 Hours
Factors 0.21 h	COZO ELECTRICIANS RETURN INIQUISVOIRE SIVS SteetWorkers	Lineai 0.19 nouis
		0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS KE10H Indust/Site Srvs Steelworkers	Linear 0.20 Hours
Factors 0.23 h		0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers	Linear 0.09 Hours
Cactors 0.1 h		
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers	0.88934
Factors 0.08 h	1 CO40 IMAINTENANCE MACHINIST UIICI EXD RETOR IIITUUS/SILE SIVS SIEEWOIKEIS	Lineal 0.071nouis
1		0.88934
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers	Linear 0.02 Hours
Factors 0.02 h		0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C070 PAINTERS KE10H Indust/Site Srys Steelworkers	Linear 0.09lHours
Factors 0.1 h		
754 0/507145 0405 0 005	C070 PAINTERS KE10H Indust/Site Srvs Steelworkers	0.88934
751 OVERTIME BASE & PRE.	C070 PAINTERS KE10H Indust/Site Srvs Steelworkers	Linear 0.15lHours
		0.88934 ISYS 0614001 .88934200 - System
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers	Linear 0.05 Hours
Factors 0.06 h		0.00034 1000 00044000 00034000 00004000
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers	0.88934
Factors 0.05 h	TE 101 IIIIMMUSIK VITO VICOITOINOIS	EUISSI VISTILISMIS
		0.88934 [SYS 061400] .88934200 - System

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter

Baseline Devl 1EFB

		Baseline Cost ar	id Basis of Estimate	Activity Filter *	Starts In FY *
751 OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworker	's Linear	0.29 Hours
Factors 0.33 h					
				0.88934 [SYS 06	514001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H Indust/Site Srvs Steelworker	rs Linear	0.12 Hours
Factors 0.14 h					
				0.88934 [SYS 06	614001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KE10H Indust/Site Srvs Steelworker	rs Linear	0.04 Hours
Factors 0.05 h					
				0.88934 [SYS 06	514001 .88934200 - Svstem
A5C SUPPLIES	0000	NONE	C210S Facilities Mamt & Maintenan	ice Linear	230.75 Dollars
Factors 255.63 d		1.015 FY00 Escalation			
				0.00004 100000	24 4001 0000 4000 0+

Line Item 1b - Corrective maintenance

0.88934 [SYS 061400] .88934200 - System

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 74 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$475.24 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. This year is based on executing the same level of effort as in FY 99, with the exception of when a facility enters cold shutdown. During cold shutdown the facility maintenance budget is reduced to 10% of the normal budget.

Basis for adjustment - Planning assumption

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 32.31 Linemen)

Cost Element

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	55.77 Hours
Factors 62.71 h				
			0.88934 [SYS 06140	01 .88934200 - Svstem
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	60.42 Hours
Factors 67.94 h				
			0.88934 [SYS 06140	01 .88934200 - Svstem
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	37.18 Hours
Factors 41.81 h				
			0.88934 [SYS 06140	01 .88934200 - Svstem
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	80.56 Hours
Factors 90.58 h				
			0.88934 [SYS 06140	01 .88934200 - Svstem

Department

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filter

Baseline Devl 1EFB

	Baseline C	OST and Basis of Estimate Activity Fi	lter * Star	ts In FY *
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	76.94 Hours
Factors 86.51 h				
			0.88934 [SYS 061400] .8893	
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	89.84 Hours
Factors 101.02 h				
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400] .8893 Linear	18.59 Hours
Factors 20.9 h	1 CO20 IELECTRICIANS	RETURNINGUS/Site Sivs Steetworkers	Linear	16.59Inouis
raciors 20.9 II			0.88934 [SYS 061400] .8893	84200 - System
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (in	cl Exp KE10H Indust/Site Srvs Steelworkers	Linear	30.98 Hours
Factors 34.84 h				
			0.88934 [SYS 061400] .8893	34200 - Svstem
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (in	cl Exp KE10H Indust/Site Srvs Steelworkers	Linear	6.20 Hours
Factors 6.97 h				
			0.88934 ISYS 0614001.8893	34200 - Svstem
750 STRAIGHT TIME BASE	I C040 IMAINTENANCE MACHINIST (in	cl Exp KE10H Indust/Site Srvs Steelworkers	Linear	37.18 Hours
Factors 41.81 h			0.00004 [0.00.004.400] 0.000	14000 Ct
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 0614001.8893 Linear	37.18 Hours
Factors 41.81 h	CO/O IPAINTERS	RETURN IIII III III III III III III III III	Lilledi	ST. TOITIOUIS
41.01			0.88934 [SYS 061400] .8893	34200 - System
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	63.52 Hours
Factors 71.42 h				
			0.88934 [SYS 061400] .8893	34200 - System
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	20.13 Hours
Factors 22.64 h				
			0.88934 [SYS 061400] .8893	
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	128.09 Hours
Factors 144.03 h			0.00024 [CVC.004400] 0.000	11200 Custom
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400] .8893 Linear	24.79 Hours
Factors 27.87 h	1 COSO IFLOMBERS AND FIFEITHERS	NETOTI IIIIdus//Site Sivs Steelworkers	Lineal	24.7311 IOUIS
21.01			0.88934 [SYS 061400] .8893	34200 - System
750 STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL WO	ORKE KE10H Indust/Site Srvs Steelworkers	Linear	54.74 Hours
Factors 61.55 h				
			0.88934 [SYS 061400] .8893	
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KD10H 776 Complex Steelworkers	Linear	3.02 Hours
Factors 3.4 h				
	0040 0400547500	1/5/01/ 1/ 1/01/ 0 0/ 1/ 1	0.88934 [SYS 061400] .8893	34200 - Svstem
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	2.79 Hours
Factors 3.14 h			0.88934 [SYS 061400] .8893	24200 System
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	U.00934 1515 0614001.0893	1.86 Hours
Factors 2.09 h	TOTO TOAKI LIVILING	TALIOIT IIIIQQSVOILE SIYS SLEEIWOIREIS	Liliedi	i.ooii iouis
2.00			0.88934 [SYS 061400] .8893	34200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KD10H 776 Complex Steelworkers	Linear	4.49 Hours
Factors 5.05 h		-		
			0.88934 [SYS 061400] .8893	34200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	4.03 Hours
Factors 4.53 h				
			0.88934 [SYS 061400] .8893	34200 - System

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl 1EFB

	Baseline Cost a	nd Basis of Estimate	Filter * Starts In FY *
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 0.93 Hours
Factors 1.05 h			
			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 3.85lHours
Factors 4.33 h			0.00024 ICVC 0044001 00024200 Custom
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Says Steelworkers	0.88934
Factors 2.09 h	1 CO40 IMAINTENANCE MACHINIST (IIICI EXD	TRETOTT IIIIdust/Site Sivs Steelworkers	Lineal 1.00li louis
2.50			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear 0.31 Hours
Factors 0.35 h			
			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear 1.55 Hours
Factors 1.74 h			
754 OVERTIME DAGE & DDE	OCTO DAINITEDO	1/54011 1 1 1/0% 0 00 1 1	0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE. Factors 2.09 h	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear 1.86 Hours
raciors 2.09 II			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear 3.17 Hours
Factors 3.57 h	T COTO III / III / III C		E111031
			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear 1.24 Hours
Factors 1.39 h			
		T.,	0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear 6.40 Hours
Factors 7.2 h			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear 1.00 Hours
Factors 1.13 h	1 0000 II EUMBERO / IND I II EI II TERO	TRE TOTT IMIGGS/ONE OF S OLCCIWOTROTS	Einear 1.00friours
in a control of the c			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C090 STRUCTURAL AND METAL WORKE	KE10H Indust/Site Srvs Steelworkers	Linear 2.74 Hours
Factors 3.08 h			
			0.88934 [SYS 061400] .88934200 - System
A5C SUPPLIES	0000 NONE	C210S Facilities Momt & Maintenance	Linear 4.963.86 Dollars
Factors 1.015 FY00 Escalation	5499.01 d		
			0.88934 [SYS 061400] .88934200 - System

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 11 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$24.18 average in this cluster

UUnit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99, with the exception of when a facility enters cold shutdown. During cold shutdown the facility maintenance budget is reduced to 10% of the normal budget.

Basis for adjustment - Planning assumption

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filter

Baseline Devl 1EFB

Starts In FY

0.88934 [SYS 061400] .88934200 - System

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50% Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

s		Cost Element		Skill		Department	Curve	Quantity	Units
	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KD10H	776 Complex Steelworkers	Linear	3.46	Hours
F	actors	3.89 h							
							0.88934 [SYS 06140	01 .88934200 - \$	System
	750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	2.60	Hours
F_{ϵ}	actors	2.92 h							
_							0.88934 [SYS 06140	01 .88934200 - \$	Svstem
	750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.39	Hours
F_{ϵ}	actors	0.44 h							
							0.88934 [SYS 06140	01 .88934200 - \$	Svstem
	751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.17	Hours
F_{ϵ}	actors	0.19 h							
_							0.88934 [SYS 06140	01 .88934200 - \$	Svstem
	751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.13	Hours
F_{ϵ}	actors	0.15 h							
		T.	1				0.88934 [SYS 06140	01 .88934200 - \$	Svstem
L	751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.02	Hours
F_{ϵ}	actors	0.02 h							
_		T	1				0.88934 [SYS 06140	01 .88934200 - \$	Svstem
	A5C	SUPPLIES	0000	NONE	C210S	Facilities Momt & Maintenance	Linear	25.64	Dollars
F	actors	28.4 d		1.015 FY00 Escalation					

Line Item 3b - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 107 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$53.44 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. This year is based on executing the same level of effort as in FY 99, with the exception of when a facility enters cold shutdown. During cold shutdown the facility maintenance budget is reduced to 10% of the normal budget.

Basis for adjustment - Planning assumption

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50% Pipefitter 12.50%

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WBS No: 1EFB04 Rocky Flats C
Activity ID: 1EXXXB0115 Raseline Cost and

Rocky Flats Closure Project

Baseline Cost and Basis of Estimate

Project

WBS Filter

WBS Filter

Baseline Devl

1EFB

Activity Filter Starts In FY This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions. Resources Cost Element Skill Department Curve **Ouantity** Units C020 ELECTRICIANS KE10H Indust/Site Srvs Steelworkers 750 STRAIGHT TIME BASE Linear 74.37 Hours 83.62 h Factors 0.88934 [SYS 061400] .88934200 - System C040 MAINTENANCE MACHINIST (incl Exp | KE10H | Indust/Site Srvs Steelworkers 750 STRAIGHT TIME BASE Linear 55.77 Hours **Factors** 62.71 h 0.88934 [SYS 061400] .88934200 - System 750 STRAIGHT TIME BASE C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers 8.51 Hours Linear 9 57 Factors 0.88934 [SYS 061400] .88934200 - System C020 ELECTRICIANS KE10H Indust/Site Srvs Steelworkers 3.72 Hours 751 OVERTIME BASE & PRE Linear Factors 4 18 h 0.88934 [SYS 061400] .88934200 - System C040 MAINTENANCE MACHINIST (incl Exp | KE10H | Indust/Site Srvs Steelworkers 751 OVERTIME BASE & PRE Linear 2.79 Hours Factors 314 h 0.88934 [SYS 061400] .88934200 - System OVERTIME BASE & PRE C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers 0.43 Hours 751 Linear Factors 0.48 h 0.88934 [SYS 061400] .88934200 - System A5C SUPPLIES 0000 NONE C210S Facilities Mgmt & Maintenance Linear -- FY00 Escalation --Factors 1.015 611 d 0.88934 [SYS 061400] .88934200 - System Line Item SYS - Contingency And Escalation BOE Resources Cost Element Units Department Curve Quantity 0000 NONE ZDEPT No Department CON CONTINGENCY Linear 1.377.42 Dollars Factors 1377.42 Dollars ESC ESCALATION 0000 NONE ZDEPT No Department Linear 563.50 Dollars WBS No: 1EFB05 663 Cluster Landlord Title: Activity ID: 1EFB0165 Description: 663 Cluster Landlord Functions, FY00 Cost Risk 2 Schedule Risk Description BOEMaterials/ Sub Contingency Total Prime Total Cost Line Item Quantity Units Labor Labor Hours Labor Cost Burden Cost Hours/Unit & Escalation Type **Total Total** Cost Cost Corrective maintenance 0.70 each HC 379 265 5.718 1.524 7.242 2.790 10.033 Preventive maintenance 0.70 each HC: 64 45 980 169 1.149 478 1.627 n Total for Activity 1EFB0165: 310 6.698 1.694 8.391 3.268 11.660 Line Item 1 - Corrective maintenance Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily BOE predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 82 corrective/routine maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98
Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Baseline Devl WBS Filter 1EFB Activity Filter *

Starts In FY *

Units - Work Packages
Unit Cost - \$334.17 average for this cluster
Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 70% of the FY 99 budget per FCP 1999-8064
Basis for adjustment - FCP 1999-8064 funding efficency return.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 32.31% (includes Linemen)

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	Cost Element	Skill	Department	Curve	Quantity Units	
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	26.51 Hours	
Factors	52.94 h	0.3612 May 2000 Earned V	/alue Factor			
				1.38645 [SYS 0613	00] 1.386448 - Target	
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	16.31 Hours	
Factors	32.57 h	0.3612 May 2000 Earned V	/alue Factor			
					001 1.386448 - Target	
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	24.47 Hours	
Factors	48.86 h					
					001 1.386448 - Target	
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	39.42 Hours	
Factors	78.71 h	0.3612 May 2000 Earned V	/alue Factor	4 000 45 10 10 00 40	001.4.000.440. T	
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers		001 1.386448 - Target 33.76 Hours	
750				Linear	33./biHours	
Factors 67.41 h 0.3612 May 2000 Earned Value Factor					001 1.386448 - Target	
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	1.36045 1515 0613 Linear	8.16 Hours	
Factors		0.3612 May 2000 Earned V		Lilledi	O. IOII IOUIS	
ruciors	10.29 11	0.3012 Iviay 2000 Lamed V	raide i actor	1 38645 ISVS 0613	001 1.386448 - Target	
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	35.35 Hours	
Factors		0.3612 May 2000 Earned V			OO.OOII IOUIO	
		0.00.12		1.38645 [SYS 0613	001 1.386448 - Target	
750	STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers	Linear	13.60 Hours	
Factors	27.15 h	0.3612 May 2000 Earned V	/alue Factor			
				1.38645 ISYS 0613	001 1.386448 - Target	
750	STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers	Linear	16.31 Hours	
Factors	32.57 h	0.3612 May 2000 Earned V	/alue Factor			
				1.38645 [SYS 0613	00] 1.386448 - Target	
750	STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers	Linear	2.72 Hours	
Factors	5.43 h	0.3612 May 2000 Earned V	/alue Factor			
				1.38645 [SYS 0613	00] 1.386448 - Target	
750	STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	27.86 Hours	
Factors	55.64 h	0.3612 May 2000 Earned V	/alue Factor			
					00] 1.386448 - Target	
750	STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	16.31 Hours	
Factors	32.57 h	0.3612 May 2000 Earned V	/alue Factor			
	<u> </u>	.		1.38645 [SYS 0613	001 1.386448 - Target	

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filter

Baseline Devl 1EFB

	baseline Co	St and Basis of Estimate Activity File	ter * Starts In FY *
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear 8.83 Hours
Factors 17.64 h	0.3612 May 2000 Earned Valu	ue Factor	
			1.38645 [SYS 061300] 1.386448 - Target
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear 56.20 Hours
Factors 112.22 h	0.3612 May 2000 Earned Valu	ue Factor	
			1.38645 [SYS 061300] 1.386448 - Target
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear 10.88 Hours
Factors 21.72 h	0.3612 May 2000 Earned Valu	ue Factor	4 000 45 FOVO 00400014 000440 T
750 STRAIGHT TIME BASE	COOC CERLICIURAL AND METAL MOL	RKE KE10H Indust/Site Srvs Steelworkers	1.38645 ISYS 0613001 1.386448 - Target Linear 24.02 Hours
Factors 47.96 h	0.3612 May 2000 Earned Valu		Linear 24.02iHours
raciors 47.90 II	0.3012 May 2000 Earned Valu	de Factor	1.38645 ISYS 0613001 1.386448 - Target
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 1.22 Hours
Factors 2.44 h	0.3612 May 2000 Earned Valu		Lineai 1.22II louis
2.11	0.0012 Way 2000 Earnou Valo	201 40001	1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 1.33 Hours
Factors 2.65 h	0.3612 May 2000 Earned Valu		
			1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 0.82 Hours
Factors 1.63 h	0.3612 May 2000 Earned Valu	ue Factor	
			1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 1.77 Hours
Factors 3.53 h	0.3612 May 2000 Earned Valu	ue Factor	
			1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 1.97 Hours
Factors 3.94 h	0.3612 May 2000 Earned Valu	ue Factor	4 000 45 - FOVO 0040001 4 000 440 - T
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	1.38645 [SYS 061300] 1.386448 - Target Linear 0.41 Hours
Factors 0.81 h	0.3612 May 2000 Earned Valu		Linear 0.41 Hours
raciors 0.01 II	0.3012 May 2000 Lamed Valu	de l'actor	1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 1.69lHours
Factors 3.37 h	0.3612 May 2000 Earned Valu		1.00110010
	0.00 .2		1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl	Exp KE10H Indust/Site Srvs Steelworkers	Linear 0.82 Hours
Factors 1.63 h	0.3612 May 2000 Earned Valu		
			1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl	Exp KE10H Indust/Site Srvs Steelworkers	Linear 0.14 Hours
Factors 0.27 h	0.3612 May 2000 Earned Valu	ue Factor	
			1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.		Exp KE10H Indust/Site Srvs Steelworkers	Linear 0.68 Hours
Factors 1.36 h	0.3612 May 2000 Earned Valu	ue Factor	
754 OVEDTIME 2.05 0.255	OOTO DANITEGO	V54011 1 1 1/0% C 2: 1 1	1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear 0.82lHours
Factors 1.63 h	0.3612 May 2000 Earned Valu	ue Factor	4 2004E [CVC 064200] 4 200440 T
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	1.38645
Factors 2.78 h	0.3612 May 2000 Earned Valu		Linear 1.39iHours
<i>raciois</i> 2.70 II	0.3012 Iviay 2000 Earned Valu	ue i acioi	1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear 0.55 Hours
Factors 1.09 h	0.3612 May 2000 Earned Valu		, Elliodi 0.001110015
	5.55.2 May 2000 Earlied Vale	·	1.38645 [SYS 061300] 1.386448 - Target
			In the contract in the fair

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter

Baseline Devl

	Daseiiii	e cost and basis of Estimat	Activity Filter *		Starts In FY *
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITT	ERS KE10H Indust/Site S	rvs Steelworkers	Linear	0.44 Hours
Factors 0.88 h	0.3612 May 2000 Earne	d Value Factor			
				1.38645 [SYS 061300	1 1.386448 - Target
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITT	ERS KE10H Indust/Site S	rvs Steelworkers	Linear	2.81 Hours
Factors 5.61 h	0.3612 May 2000 Earne	d Value Factor			
				1.38645 [SYS 061300	1 1.386448 - Target
751 OVERTIME BASE & PRE.	C090 STRUCTURAL AND METAL	_ WORKE KE10H Indust/Site S	rvs Steelworkers	Linear	1.20 Hours
Factors 2.4 h	0.3612 May 2000 Earne	d Value Factor			
				1.38645 [SYS 061300	1 1.386448 - Target
A5C SUPPLIES	0000 NONE	C210S Facilities Mo	mt & Maintenance	Linear	2.177.83 Dollars
Factors 1.015 FY00 Escalation	4284.57 d	0.3612 M	ay 2000 Earned Value Factor		
				1.38645 [SYS 061300] 1.386448 - Target

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 141 preventative maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$31.60 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 70% of the FY 99 budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficency return.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50% Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity Units
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	32.63 Hours
Factors 65.15 h	0.3612 May 2000 Earned	d Value Factor		
			1.38645 [SYS 06130	00] 1.386448 - Target
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST	T (incl Exp KE10H Indust/Site Srvs Steelworkers	Linear	24.47 Hours
Factors 48.86 h	0.3612 May 2000 Earned	d Value Factor		
			1.38645 [SYS 06130	00] 1.386448 - Target
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTI	ERS KE10H Indust/Site Srvs Steelworkers	Linear	3.74 Hours
Factors 7.46 h	0.3612 May 2000 Earned	d Value Factor		
			1.38645 [SYS 06130	00] 1.386448 - Target
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	1.63 Hours
Factors 3.26 h	0.3612 May 2000 Earned	d Value Factor		
			1.38645 [SYS 06130	001 1.386448 - Target

WBS No: 1EFB05 Rocky Flats Closure Project Activity ID: 1EFB0165 **Baseline Cost and Basis of Estimate**

Baseline Devl Proiect WBS Filter 1EFB Activity Filter

751	OVERTIN	//E BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.22 Hours
Factor	2.44	2.44 h 0.3612 May 2000 Earned Value Factor						
	1.38645 ISYS 0613001 1.386448 - Target							
751	OVERTIN	ME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.19 Hours
Factor	Cactors 0.37 h 0.3612 May 2000 Earned Value Factor							
	1 38645 ISYS 0613001 1 386448 - Target					01 1 386448 - Target		

A5C SUPPLIES 0000 NONE C210S Facilities Mgmt & Maintenance 241.98 Dollars

476.06 d 1.015 -- FY00 Escalation --0.3612 May 2000 Earned Value Factor Factors

1.38645 [SYS 061300] 1.386448 - Target

0.88934 [SYS 061400] 88934200 - System

Starts In FY

Activity ID: 1EFB0170 Description: 663 Cluster Landlord Functions, FY01 2 Schedule Risk Cost Risk BOELabor Labor Hours Labor Cost Materials/ Sub Contingency Total Prime Burden Cost Total Cost Line Item Description Units **Ouantity** Hours/Unit & Escalation Type **Total Total** Cost Cost Corrective maintenance 0.70 each HC 673 471 10.154 2.707 12.862 4.844 n 17.705 0.70 each HC 79 1.740 301 2.041 830 Preventive maintenance 113 0 2.871 EE SYS Contingency And Escalation 1.00 ea 0 0 0 1.088 1.088 0 1.088 Total for Activity 1EFB0170: 550 11.894 3.008 1.088 15.991 5.674 21.664

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 82 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$334.17 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 70% of the FY 99 budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficency return.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 32.31% (includes Linemen)

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es	Cost Element		Skill	Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	47.08	Hours
	7 .	50.04 b						

Factors 52.94 h

750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	43.45 Hours
Factors 48.86 h				
			0.88934 [SYS 06140	01 .88934200 - Svstem

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WBS No: 1EFB05 1EFB0170 Activity ID:

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter 1E
Activity Filter *

Baseline Devl 1EFB

Baseline Cost	and Basis of Estimate	WBS Filter 1EFB	Starts In FY *
C010 CARPENTERS	KE10H Indust/Site Srvs Steelwork		28.97 Hours
CO20 ELECTRICIANS	KE10H Indust/Site Style Steelwork		4001 .88934200 - System 59.95 Hours
1 COZO IEEEC INICIANS	RETOTT IIII GUSI/SILE SIVS SIEEIWOIN	eis Lilleai	39.93II louis
			4001 .88934200 - Svsten
C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwork	ers Linear	70.00 Hours
		0.888.27	4001 88934200 - System
C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwork		14.49 Hours
0000 5150500000			4001 .88934200 - System
I C020 IELECTRICIANS	KE10H Indust/Site Srvs Steelwork	ers Linear	62.77 Hours
		0.88934 ISYS 061	4001 .88934200 - System
C040 MAINTENANCE MACHINIST (incl E	xp KE10H Indust/Site Srvs Steelwork		24.15 Hours
0040 MANUTENIANOE MAQUINIOT (; 15	1/51011 1 1/0" 0 0 1 1		4001 .88934200 - System
1 C040 IMAINTENANCE MACHINIST (Incl E	xb KE10H Indust/Site Srvs Steelwork	ers Linear	28.97 Hours
		0.88934 [SYS 061	4001 .88934200 - Svsten
C040 MAINTENANCE MACHINIST (incl E	xp KE10H Indust/Site Srvs Steelwork	ers Linear	4.83 Hours
COZO DAINTEDO	I/E4011 Indust/Cita Crus Stanburgh		400] .88934200 - System 49.48 Hours
CU/U PAINTERS	RETUR Indust/Site Sivs Steelwork	ers Linear	49.46 nouis
		0.88934 [SYS 061	400] .88934200 - System
C070 PAINTERS	KE10H Indust/Site Srvs Steelwork	ers Linear	28.97 Hours
		2 2222 / 10/10 22	4001 0000 4000 0
COSO DI LIMBERS AND DIDECITTERS	KE10H Indust/Site Styre Stockwork		4001 .88934200 - System 19.32 Hours
1 COOO IFLOMBENS AND FIFEITH ENS	NETOTI III Idust/Site Sivs Steetwork	eis Lilleai	19.321110013
		0.88934 [SYS 061	4001 .88934200 - Svsten
C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwork	ers Linear	15.69 Hours
		0.00004 10000 000	4001 00004000 - 0
C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srys Steelwork		99.80 Hours
1 000 11 2011211071112111 211112110			
			4001 .88934200 - Svsten
C090 ISTRUCTURAL AND METAL WORK	E KE10H Indust/Site Srvs Steelwork	ers Linear	42.65 Hours
		0.8034 [575.061	4001 99034300 Systom
C010 CARPENTERS	KE10H Indust/Site Srvs Steelwork		2.17 Hours
			4001 .88934200 - Svsten
I C010 ICARPENTERS	KE10H Indust/Site Srvs Steelwork	ers Linear	1.45 Hours
		0.00004 10000 0	4001 00004000 0
		11 88934 15 Y S 1161	4001 88934700 - SVeten
C010 CARPENTERS	KE10H Indust/Site Srvs Steelwork		4001 .88934200 - System 2.36 Hours
	C020 ELECTRICIANS C020 ELECTRICIANS C020 ELECTRICIANS C020 ELECTRICIANS C020 ELECTRICIANS C020 ELECTRICIANS C040 MAINTENANCE MACHINIST (incl E C040 MAINTENANCE MACHINIST (incl E C040 MAINTENANCE MACHINIST (incl E C070 PAINTERS C070 PAINTERS C080 PLUMBERS AND PIPEFITTERS C080 PLUMBERS AND PIPEFITTERS	C020 ELECTRICIANS KE10H Indust/Site Srvs Steelwork C040 IMAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelwork C040 IMAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelwork C040 IMAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelwork C070 IPAINTERS KE10H Indust/Site Srvs Steelwork C070 IPAINTERS KE10H Indust/Site Srvs Steelwork C080 IPLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelwork C080 IPLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelwork C080 IPLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelwork C090 ISTRUCTURAL AND METAL WORKE KE10H Indust/Site Srvs Steelwork C010 ICARPENTERS KE10H Indust/Site Srvs Steelwork	C010 CARPENTERS KE10H Indust/Site Srvs Steelworkers Linear

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1EFB05 1EFB0170

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl 1EFB

	Daseille Cos	Activity File	ter *	Starts In FY *
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	3.00 Hours
Factors 3.37 h				
		1/5/01/ 1 1/01/ 0 0/ 1		001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	3.50 Hours
Factors 3.94 h			0.88934 [575.06140	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	1 inear	3.14 Hours
Factors 3.53 h				
			0.88934 [SYS 06140	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	0.72 Hours
Factors 0.81 h				
751 OVERTIME BASE & PRE.	COAO MANINTENIANICE MACHINICE (iz al 6	Exp KE10H Indust/Site Srvs Steelworkers		001 .88934200 - Svstem 1.45 Hours
751 OVERTIME BASE & PRE. Factors 1.63 h	1 CU40 IMAINTENANCE MACHINIST (INCLE	EXD KETUH IIndust/Site Srvs Steelworkers	Linear	1.45IHOUIS
1.03			0.88934 ISYS 06140	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl E	Exp KE10H Indust/Site Srvs Steelworkers	Linear	1.21 Hours
Factors 1.36 h				
			0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl E	Exp KE10H Indust/Site Srvs Steelworkers	Linear	0.24 Hours
Cactors 0.27 h			0.00004 10040 00446	201 0000 4000 0 4
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 ISYS 06140 Linear	001 .88934200 - Svstem 1.45 Hours
Factors 1.63 h	COTO FAIINTERS	RETOTT IIIIdust/Site Sivs Steelworkers	Lilleal	1.43 110015
1.00			0.88934 [SYS 06140	00] .88934200 - System
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	2.47 Hours
Factors 2.78 h				
				00] .88934200 - System
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	0.78 Hours
Factors 0.88 h			0.88034 [SVS 06140	00] .88934200 - System
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	4.99 Hours
Factors 5.61 h		TILE TO THI IMMOVE OF THE STATE	- IIIISGI	1.001110410
			0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	0.97 Hours
Factors 1.09 h				
754 01/5071145 0405 4 005	Occor OTPLICTURAL AND METALLINGS	VE VE4011 1 1 1/0': 0 0: 1 1		001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	I C090 ISTRUCTURAL AND METAL WORI	KE KE10H Indust/Site Srvs Steelworkers	Linear	2.13 Hours
Factors 2.4 h			0.88034 [SVS 06140	001 .88934200 - Svstem
A5C SUPPLIES	0000 NONE	C210S Facilities Momt & Maintenance	U.00934 1313 00140	3.867.60 Dollars
Factors 1.015 FY00 Escalation	4284.57 d		=11.19.501	O O O O O O O O O O O O O O O O O O O
			0.88934 [SYS 06140	001 .88934200 - System

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 141 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98 Item Desc - Fiscal Year Preventive Maintenance

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Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Activity Filter Baseline Devl 1EFB

Curve

Starts In FY *

Quantity

Units

429.73 Dollars

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$31.60 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 70% of the FY 99

Basis for adjustment - FCP 1999-8064 funding efficency return.

The percentage of maintenance effort (labor Type) required is as follows:

0000 NONE

Electrician 50.00% (includes Linemen)

Cost Element

Maint. Mech 37.50% Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

750 STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	57.94 Hours
Factors 65.15 h						
					0.88934 [SYS 06140	01 .88934200 - Svstem
750 STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	43.45 Hours
Factors 48.86 h						
					0.88934 [SYS 06140	01 .88934200 - Svstem
750 STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.63 Hours
Factors 7.46 h						

Department

C210S Facilities Mgmt & Maintenance

0.88934 [SYS 061400] .88934200 - System C020 ELECTRICIANS 751 OVERTIME BASE & PRE. KE10H Indust/Site Srvs Steelworkers 2.90 Hours Linear Factors 3.26

0.88934 [SYS 061400] .88934200 - System 751 OVERTIME BASE & PRE C040 MAINTENANCE MACHINIST (incl Exp | KE10H | Indust/Site Srvs Steelworkers 2.17 Hours Linear Factors 2.44 h

751 OVERTIME BASE & PRE. C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers 0.33 Hours Linear 0.37 Factors h 0.88934 [SYS 061400] .88934200 - System

Factors 1.015 -- FY00 Escalation --476.06 d

0.88934 [SYS 061400] .88934200 - System

0.88934 [SYS 061400] .88934200 - System

Line Item SYS - Contingency And Escalation

A5C SUPPLIES

BOE

BOE

Resources

es		Cost Element		Skill		Department	Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	655.80	Dollars
	Factors	655.803 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	432.66	Dollars

432.665 Dollars

Activity ID: 1EFB0175 Description: 663 Cluster Landlord Functions, FY02					Cost Risk 2 Schedule Risk 1							
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
1	Corrective maintenance	0.70	each	НС	673	471	10.154	2.707	0	12.862	3.584	16.446
3	Preventive maintenance	0.70	each	НС	113	79	1.740	301	0	2.041	614	2.655
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	2.848	2.848	0	2.848
	al for Activ	ity 1EER017	5.		550	11 80/	3 008	2 8/18	17 750	/ 100	21 0/0	

Line Item 1 - Corrective maintenance

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for

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Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Baseline Devl Proiect WBS Filter 1EFB Activity Filter

Starts In FY

the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 82 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

1EFB05

1EFB0175

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$334.17 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 70% of the FY 99 budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficency return.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 32.31% (includes Linemen)

13.85% Maint. Mech Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

WBS No:

Activity ID:

S Cost Element	Skill	Department	Curve	Ouantity Units
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	43.45 Hours
Factors 48.86 h				
			0.88934 [SYS 06140	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	47.08 Hours
Factors 52.94 h				
			0.88934 [SYS 06140	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	28.97 Hours
Factors 32.57 h				
			0.88934 [SYS 06140	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	62.77 Hours
Factors 70.58 h				
			0.88934 [SYS 06140	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	70.00 Hours
Factors 78.71 h				
			0.88934 [SYS 06140	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	14.49 Hours
Factors 16.29 h				
			0.88934 [SYS 06140	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	59.95 Hours
Factors 67.41 h				
			0.88934 [SYS 06140	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST	(incl Exp KE10H Indust/Site Srvs Steelworkers	Linear	28.97 Hours
Factors 32.57 h				
			0.88934 [SYS 06140	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	L C040 MAINTENANCE MACHINIST	(incl Exp KE10H Indust/Site Srvs Steelworkers	Linear	4.83 Hours
Factors 5.43 h				
-			0.88934 ISYS 06140	001 .88934200 - Svstem

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Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Ba
WBS Filter 1E
Activity Filter *

Baseline Devl 1EFB

1EFB0175	Baseline Cost	and Basis of Estimate		1EFB *	Starts In FY *
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl E	xp KE10H Indust/Site Srvs Steelwork		Linear	24.15 Hours
Factors 27.15 h					
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelwork	ore	0.88934 ISYS 0614 Linear	4001 .88934200 - Svstem 28.97 Hours
Factors 32.57 h		NE TOTT IIII III III III III III III III I	CIS	Lilleal	20.371110013
					4001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelwork	ers	Linear	49.48 Hours
Factors 55.64 h				0.88934 [SVS.061.	4001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwork	ers	Linear	99.80 Hours
Factors 112.22 h					
750 STRAIGHT TIME BASE	COOO DI LIMPERS AND DIDEFITTERS	KE10H Indust/Site Srvs Steelwork			4001 .88934200 - Svstem 15.69 Hours
750 STRAIGHT TIME BASE Factors 17.64 h	C080 PLUMBERS AND PIPEFITTERS	KETUH IIndust/Site Srvs Steelwork	ers	Linear	15.69IHOUIS
17.01				0.88934 [SYS 0614	4001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwork	ers	Linear	19.32 Hours
Factors 21.72 h				0.00004 [0.0004	4001 0000 4000 Ct
750 STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL WORK	(F KE10H Indust/Site Srys Steelwork	ers	0.88934 ISYS 0614 Linear	4001 .88934200 - Svstem 42.65 Hours
Factors 47.96 h			1	Elitodi	12.001110010
					4001 .88934200 - Svstem
751 OVERTIME BASE & PRE. Factors 1.63 h	C010 CARPENTERS	KE10H Indust/Site Srvs Steelwork	ers	Linear	1.45 Hours
Factors 1.63 h				0.88934 [SYS 061 ₆	400] .88934200 - System
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelwork	ers	Linear	2.17 Hours
Factors 2.44 h					
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelwork	oro	0.88934 [SYS 0614 Linear	400] .88934200 - System 2.36 Hours
Factors 2.65 h	COTO CARPENTERS	RETOTI IIIIdust/Site Sivs Steelwork	CIS	Lilleal	2.30 110015
			T.	0.88934 [SYS 0614	400] .88934200 - System
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwork	ers	Linear	3.00 Hours
Factors 3.37 h				0.88034 [SVS 061.	4001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwork	ers	Linear	0.72 Hours
Factors 0.81 h					
754 0//507/145 0 005 0 005	Occo ELECTRICIANO	1/54011 1 1/0" 0 0 1 1			4001 .88934200 - Svstem
751 OVERTIME BASE & PRE. Factors 3.94 h	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwork	ers	Linear	3.50 Hours
1 40.075 0.04				0.88934 [SYS 061 ₄	4001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwork	ers	Linear	3.14 Hours
Factors 3.53 h				0.00004 [0]/0.004	400] 00004000 0
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl E	vn KE10H Indust/Site Srys Steelwork	ere	0.88934 ISYS 0614 Linear	4001 .88934200 - Svstem 1.45 Hours
Factors 1.63 h		AN THE 1311 HINGSVOIC SIVS SICESWOIN	VIV 1	Lilloui	1.701110013
		T	П		4001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl E	xp KE10H Indust/Site Srvs Steelwork	ers	Linear	0.24 Hours
Factors 0.27 h				0.88934 [SYS 061.	4001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl E	xp KE10H Indust/Site Srvs Steelwork	ers	Linear	1.21 Hours
Factors 1.36 h					
_				0.88934 [SYS 0614	400] .88934200 - System

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl 1EFB

			Baseline Cost ar	ia Basis	or Estimate	Activity Filter *		Starts In FY *
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworker	'S	Linear	2.47 Hours
Factors	2.78 h							
		1		T			0.88934 [SYS 061400	01 .88934200 - Svstem
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworker	'S	Linear	1.45 Hours
Factors	1.63 h							
				1			0.88934 [SYS 061400	01 .88934200 - Svstem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworker	'S	Linear	4.99 Hours
Factors	5.61 h							
	I	1	1	I			0.88934 [SYS 06140	01 .88934200 - Svstem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworker	'S	Linear	0.97lHours
Factors	1.09 h							
	1						0.88934 [SYS 06140	
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworker	S	Linear	0.78lHours
Factors	0.88 h							
	T	1					0.88934 [SYS 061400	
751	OVERTIME BASE & PRE.	C090	ISTRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworker	'S	Linear	2.13 Hours
Factors	2.4 h							
_		1	T				0.88934 [SYS 06140	
A5C	SUPPLIES	0000	INONE	C210S	Facilities Mamt & Maintenan	ce	Linear	3.867.60 Dollars
Factors	4284.57 d		1.015 FY00 Escalation					

Line Item 3 - Preventive maintenance

0.88934 [SYS 061400] .88934200 - System

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance basis from which RFCSS proposed, possibled, and projected work load. These items were the basis from which RFCSS proposed, possibled, and was awarded the Site.

maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 141 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$31.60 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 70% of the FY 99 budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficency return.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50% Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

s		Cost Element		Skill		Department	Curve	Ouantity	Units
L	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	57.94	Hours
1	actors	65.15 h							
_							0.88934 [SYS 06140	01 .88934200 - S	System
L	750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	43.45	Hours
1	actors	48.86 h							
_							0.88934 [SYS 06140	01 .88934200 - S	Svstem

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Baseline Devl WBS Filter 1EFB

	Dascille Cost a	na basis of Estimate	Activity Filter *	Starts In FY *
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwork	kers Linear	6.63 Hours
Factors 7.46 h				
			0.88934 [SYS 061	4001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwork	kers Linear	2.90 Hours
Factors 3.26 h				
			0.88934 [SYS 061	4001 .88934200 - System
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelwork	kers Linear	2.17 Hours
Factors 2.44 h				
			0.88934 [SYS 061	4001 .88934200 - System
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwork	kers Linear	0.33 Hours
Factors 0.37 h				
			0.88934 [SYS 061	4001 .88934200 - System
A5C SUPPLIES	0000 NONE	C210S Facilities Mamt & Mainten	ance Linear	429.73 Dollars
<i>Factors</i> 476.06 d	1.015 FY00 Escalation			

0.88934 [SYS 061400] .88934200 - System

Line Item SYS - Contingency And Escalation

BOE

Resources

es	Cost Element Skill			Department	Curve	Quantity	Units		
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	1.954.93	Dollars
	Factors	1954.93 Dollars							
		ESCALATION	0000	NONE	ZDEPT	No Department	Linear	892.62	Dollars

Factors 892.617 Dollars

Activity ID: 1EFB0180 Description: 663 Cluster Cold Shutdown FY03

Cost Risk 1 Schedule Risk

Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
1	Corrective maintenance	1.00	each	HC	82	82	1.771	466	0	2.236	600	2.837
3	Preventive maintenance	1.00	each	HC	14	14	304	52	0	356	103	459
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	801	801	0	801
·	To	Total for Activity 1EEB0180:					2 075	517	801	3 393	703	4 096

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 16 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$209.25 average for this cluster

Adjustment factor - FY99 is used as a base year. FY00 thru 05 are equal to FY99 scope

Revised number of work orders - No Change

Basis for adjustment - Directed targets.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 30.77% (includes Linemen)

Maint. Mech 13.85% Painter 10.77%

Pipefitter 23.08%

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WBS No: 1EFB05 1EFB0180 Activity ID:

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Activity Filter

Baseline Devl 1EFB

Starts In FY *

Metal Worker 4.62% Stationary Operating Engineer 1.54%

		es

	97.47			
Cost Element	Skill	<u>Department</u>	Curve	Quantity Uni
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	5.31 Hours
actors 5.97 h			0.88034 [SVS 061	4001 .88934200 - Svster
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	5.75 Hours
Cactors 6.47 h				
				4001 .88934200 - Svster
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	3.54 Hours
actors 3.98 h			0.88034 [676.064	4001 .88934200 - Svster
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	0.86934 1313 061 Linear	7.67 Hours
actors 8.62 h	1 0020 IEEEOTTAOIAIGO	TAL TOTA IIII GUSTONIC STAS STEETWONE S	Lincal	7.071110013
			0.88934 [SYS 061	4001 .88934200 - Svstei
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	7.33 Hours
Factors 8.24 h				
				4001 .88934200 - Svster
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	8.56lHours
Factors 9.62 h			0.00004 10000.0	4001 00004000 0:
750 STRAIGHT TIME BASE	CO40 MAINTENANCE MACHINIS	T (incl Exp KE10H Indust/Site Srvs Steelworkers	0.88934 ISYS 061 Linear	4001 .88934200 - Svster 3.54 Hours
Factors 3.98 h	1 CO40 IMAINTENANCE MACHINIS	THICLEAD RETUIT IIIIdus//Site SIVS Steelworkers	Linear	3.341110013
<i>aciors</i> 0.00 II			0.88934 [SYS 061	4001 .88934200 - Svste
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIS	T (incl Exp KE10H Indust/Site Srvs Steelworkers	Linear	0.59 Hours
Factors 0.66 h				
				4001 .88934200 - Svster
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIS	T (incl Exp KE10H Indust/Site Srvs Steelworkers	Linear	2.95 Hours
Factors 3.32 h			0.00004 10000.004	1001 0000 1000 0 1
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 ISYS 061 Linear	4001 .88934200 - Syster 6.05 Hours
Factors 6.8 h	COTO IFAINTERS	RETURN IIII III III III III III III III III	Lilleal	0.03inouis
0.0 11			0.88934 [SYS 061	4001 .88934200 - Svster
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	3.54 Hours
Factors 3.98 h				
			0.88934 [SYS 061	4001 .88934200 - Svster
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITT	ERS KE10H Indust/Site Srvs Steelworkers	Linear	1.92 Hours
Factors 2.16 h				
750 OTDAIGUT TIME DAGE	Occo DI LIMPEDO AND DIDEFITT	:EDO 1/E4011 1 1 1/0% O 00 1 1		4001 .88934200 - Syster
750 STRAIGHT TIME BASE Factors 2.65 h	C080 PLUMBERS AND PIPEFITT	ERS KE10H Indust/Site Srvs Steelworkers	Linear	2.36 Hours
2.05 II			0.88934 [SVS 061	4001 .88934200 - Svster
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITT	ERS KE10H Indust/Site Srvs Steelworkers	Linear	12.19 Hours
Factors 13.71 h				
			0.88934 [SYS 061	4001 .88934200 - Svster
750 STRAIGHT TIME BASE	C090 STRUCTURAL AND METAI	_ WORKE KE10H Indust/Site Srvs Steelworkers	Linear	5.21 Hours
Factors 5.86 h				
o		DATOD A METOD II I MONTO CONTRACTOR I		4001 .88934200 - Syster
750 STRAIGHT TIME BASE	I R070 IWASTE TREATMENT OPE	RATOR A KE10H Indust/Site Srvs Steelworkers	Linear	1.77 Hours
Factors 1.99 h				

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter

Baseline Devl 1EFB

	baseline C	Cost and Basis of Estimate Activity File	ter * Starts In FY *
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 0.18 Hours
Factors 0.2 h			
754 OVEDTIME 2 : 25 2 225	0040 0400517770	1/54011 L L 1/0'; 2 2 2 L L	0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 0.28 Hours
Factors 0.32 h			0.00024 [CVC.064400] 00024200 Custom
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400] .88934200 - System Linear 0.27 Hours
Factors 0.3 h	1 COTO ICARPENTERS	RETURN IIII III III III III III III III III	Lineal 0.271Hours
Tations 0.5 II			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 0.43lHours
Factors 0.48 h			
			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 0.38 Hours
Factors 0.43 h			
			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 0.36lHours
Factors 0.41 h			
754 OVEDTIME DAGE & DDE	COAC MAINTENANCE MACHINICT (0.88934
751 OVERTIME BASE & PRE. Factors 0.17 h	1 C040 IMAINTENANCE MACHINIST (I	ncl Exp KE10H Indust/Site Srvs Steelworkers	Linear 0.15lHours
Factors 0.17 h			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	CO40 MAINTENANCE MACHINIST (ii	ncl Exp KE10H Indust/Site Srvs Steelworkers	Linear 0.18 Hours
Factors 0.2 h	TOO TO JIM MINTERY MADE WITHOUT (III	THE EXP NE TOTT INGGGGORG OFFO GLOOWORKER	Elitodi C. Toji Todio
			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (ii	ncl Exp KE10H Indust/Site Srvs Steelworkers	Linear 0.03 Hours
Factors 0.03 h			
			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear 0.30 Hours
Factors 0.34 h			
	T I		0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear 0.18 Hours
Factors 0.2 h			0.00004 [0.000.0001.0000.000.000.000.000.000.000
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTER	S KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400] .88934200 - System Linear 0.10 Hours
Factors 0.11 h	1 COOO IPLOWBERS AND PIPERITIES	S RETURNINGUS//Site SIVS Steetworkers	Lineal 0.10inouis
rations 0.11 II			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTER	S KE10H Indust/Site Srvs Steelworkers	Linear 0.61 Hours
Factors 0.69 h			
			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTER	S KE10H Indust/Site Srvs Steelworkers	Linear 0.12 Hours
Factors 0.13 h			
	T		0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	I C090 ISTRUCTURAL AND METAL W	ORKE KE10H Indust/Site Srvs Steelworkers	Linear 0.26 Hours
Factors 0.29 h			
754 OVEDTIME DAGE 0 DD5	DOTO WASTE TOP ATMENT OFFERS	TOD A 1/54011 I. J. 1/0': 0 0: 1 1	0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	I RU/U IWASTE TREATMENT OPERA	TOR A KE10H Indust/Site Srvs Steelworkers	Linear 0.09lHours
Factors 0.1 h			0.88034 [CVC.064400] 00034300 Custom
A5C SUPPLIES	0000 NONE	C210S Facilities Mamt & Maintenance	0.88934
Factors 523.47 d	I GOOD HYOIVE	1 02100 II acilities midifit & maintenance	Lineai +05.541D01lais
			0.88934 [SYS 061400] .88934200 - System

Line Item 3 - Preventive maintenance

BOE Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Baseline Devl WBS Filter 1EFB

WBS FIITET TEFD
Activity Filter *

Starts In FY *

Curve

Quantity

0.88934 [SYS 061400] .88934200 - System

Units

corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

Approximately 18 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98 Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$30.28 average in this cluster

Adjustment factor - FY99 is used as a base year. FY00 thru 05 are equal to FY99 scope

Revised number of work orders - No Change Basis for adjustment - Directed targets.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Cost Element

Maint. Mech 37.50%

Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

750 STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	7.08 Hours
Factors 7.96 h						
			,		0.88934 [SYS 061400	1.88934200 - Svstem
750 STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Ext	KE10H	Indust/Site Srvs Steelworkers	Linear	5.31 Hours
Factors 5.97 h						
					0.88934 ISYS 061400	1.88934200 - System
750 STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.81 Hours
Factors 0.91 h						
			,		0.88934 [SYS 061400	1.88934200 - Svstem
751 OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.36 Hours
Factors 0.4 h						
					0.88934 [SYS 061400	1 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Ext	KE10H	Indust/Site Srvs Steelworkers	Linear	0.27 Hours
Factors 0.3 h						
					0.88934 [SYS 061400	1 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.04 Hours
Factors 0.05 h						
			ń.		0.88934 [SYS 061400	1.88934200 - Svstem
A5C SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	51.72 Dollars
Factors 58.16 d						

Department

Line Item SYS - Contingency And Escalation

BOE

Resources

es		Cost Element		Skill		Department	Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	541.81	Dollars
	Factors	541.808 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	259.43	Dollars
	Factors	259.429 Dollars							

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl

WBS Filter 1EFB
Activity Filter *

Starts In FY

WBS No: 1EFB0	6 Title: 903 Area	a Cluster Landlord										
Activity ID: 1EFE	30185 Description: 903 Area	a Cluster Landlord Functions, I	FY01					Cost Risk	1 Schedule R	Risk 1		
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
01 - tJ3GE011005	landlord support	1.0	0 each	HC	3.044	3.044	80.166	41.489	0	121.656	38.239	159.895
SYS	Contingency And Escalation	1.0	0 ea	EE	0	0	0	0	8.458	8.458	0	8.458
		Total for Activ	vity 1FFB0185			3 044	80 166	41 489	8 458	130 114	38 239	168 353

Line Item 01 - tJ3GE011005 - landlord support

BOE

Historical Data Source:

WAD number 83, 1.1.03.12.01, FY98 WADLET "Sep98" Spending Variance Reports "002a" located in the Planning & Intergration Reporting System. (Please note that actual costs were not collected at the line item level.)

Item Desc

Support for landlord functions, Conduct of Operations, Plan of the Day, radio communication with field activities and support of the contractor field activities. Property management and inventory of controlled items will be maintained. Maintenance and repair of the buildings will be provided by CSS and is not scoped or funded in this activity. This line item represents 100% of the labor hours and approximately 100% of the subcontract and supplies for the WADLet.

Breakdown of Historical Cost Data: Item: Operate 903/ 905 Contractor Yard Units: 1 Lot

Unit Cost:

Wadlet - 3,644 Hours, \$49,722 Subcontracts and Supplies Line Item - 3,644 Hours, \$49,722 Subcontracts and Supplies

Unit Cost Adjustment Factor: 11.6% percent labor increase
74.4% Subcontract and Supplies decrease

Revised Unit Cost: 4,066 Hours, \$12,768 Subcontract and Supplies

Basis for adjustment:

1. Hours have been increased by approximately 11.6 percent due to additional support requirements necessary to properly provide oversight for the trailers and storage lockers in the yard.

2.Subcontract and supplies, a major portion of the reduction is due to Programmatic Support in FY99 being added as an additional line item. The operation of the contractor yard is attempting to provide more managerial and physical types of support and thus utilizing less supplies to meet objectives.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	Cost Element		Skill		D are entire and	Curve	Outmetitus	Units
s					Department		Ouantity	
750	STRAIGHT TIME BASE	G010	ADMINISTRATIVE ASSISTANTS	R100S	RMRS Salaried	Linear	88.93	Hours
Factors	100 HOURS							
						0.88934 [SYS 06140	01 .88934200 - S	vstem
750	STRAIGHT TIME BASE	P090	INDUSTRIAL HYGIENISTS	R100S	RMRS Salaried	Linear	206.77	Hours
Factors	232.5 hours							
						0.88934 [SYS 06140	0] .88934200 - S	ystem
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	2,676.92	Hours
Factors	3010 hours							
						0.88934 [SYS 06140	0] .88934200 - S	ystem
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	R100S	RMRS Salaried	Bell Shaped	71.15 l	Hours
Factors	80 h							
						0.88934 [SYS 06140	01 .88934200 - S	ystem
A5C	SUPPLIES	S030	GEOLOGISTS	R100S	RMRS Salaried	Linear	1,805.36	Dollars
Factors	2000 DOLLARS		1.015 FY00 Escalation					
						0.88934 [SYS 06140	01 .88934200 - S	vstem

WBS No: 1EFB06 Proiect Rocky Flats Closure Project Activity ID: 1EFB0185 **Baseline Cost and Basis of Estimate**

Baseline Devl WBS Filter 1EFB Activity Filter

A5H SUBCONTRACTED SRVS 0000 NONE R100S RMRS Salaried 34.891.78 Dollars Linear

Factors 38357.6 d 1.02283 -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - System P070 COST ESTIMATORS PLANNERS AN R100S RMRS Salaried A5H SUBCONTRACTED SRVS 2.972.91 Dollars Linear

3268.21 p&i support 1.02283 -- FY00 Escalation --Factors

0.88934 [SYS 061400] .88934200 - System A5H SUBCONTRACTED SRVS R100S RMRS Salaried 1.819.29 Dollars P150 TRAINERS Linear

2000 dollars 1.02283 -- FY00 Escalation --Factors

0.88934 [SYS 061400] .88934200 - System

Starts In FY

Line Item SYS - Contingency And Escalation

BOE

Resources

es		Cost Element		Skill		Department	Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	5.096.24	Dollars
_	Factors	5096.24 Dollars							
[ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	3.362.23	Dollars

Factors 3362.23 Dollars

Activity ID: 1EFB0190 Cost Risk 1 Schedule Risk Description: 903 Area Cluster Landlord Functions, FY00

Units BOELabor Labor Hours Labor Cost Materials/ Sub Contingency Total Prime Burden Cost Total Cost Line Item Description **Ouantity** Hours/Unit TypeTotal Total Cost & Escalation 01 - tJ3GE0110A landlord support 1.00 each 3.818 3.818 98.679 12.189 110.868 48.155 159.023 Total for Activity 1EFB0190: 3.818 98.679 12.189 Λ 110.868 48.155 159.023

Line Item 01 - tJ3GE0110AC - landlord support

BOE

Historical Data Source:

WAD number 83, 1.1.03.12.01, FY98 WADLET "Sep98" Spending Variance Reports "002a" located in the Planning & Intergration Reporting System. (Please note that actual costs were not collected at the line item level.)

Support for landlord functions, Conduct of Operations, Plan of the Day, radio communication with field activities and support of the contractor field activities. Property management and inventory of controlled items will be maintained. Maintenance and repair of the buildings will be provided by CSS and is not scoped or funded in this activity. This line item represents 100% of the labor hours and approximately 100% of the subcontract and supplies for the

Breakdown of Historical Cost Data:

Item: Operate 903/ 905 Contractor Yard

Units: 1 Lot

Unit Cost:

Wadlet - 3,644 Hours, \$49,722 Subcontracts and Supplies Line Item - 3,644 Hours, \$49,722 Subcontracts and Supplies

Unit Cost Adjustment Factor: 11.6% percent labor increase

74.4% Subcontract and Supplies decrease

Revised Unit Cost: 4,066 Hours, \$12,768 Subcontract and Supplies

Basis for adjustment:

1. Hours have been increased by approximately 11.6 percent due to additional support requirements necessary to properly provide oversight for the trailers and storage lockers in the yard.

2. Subcontract and supplies, a major portion of the reduction is due to Programmatic Support in FY99 being added as an additional line item. The operation of the contractor yard is attempting to provide more managerial and physical types of support and thus utilizing less supplies to meet objectives.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

s	Cost Element	Skill	Department	Curve	Ouantity Units
	750 STRAIGHT TIME BASE	G010 ADMINISTRATIVE ASSISTANTS	R100S RMRS Salaried	Linear	93.45 Hours
	- 400 1101100	0.07404 4 0000 5 1144			

HOURS 0.67401 January 2000 Farned Value Factor Factors 100

1.38645 [SYS 061300] 1.386448 - Target

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl 1EFB

				Daseille	Sost and Das	Activit	tv Filter *		Starts In FY *
750	STRAIGHT	TIME BASE	G010	ADMINISTRATIVE ASSISTANT	TS R1005	RMRS Salaried		Alternate Linear	507.42 Hours
Factors	543	hours		0.67401 January 2000 Earne	ed Value Factor				
				T				1.38645 [SYS 06130	01 1.386448 - Target
750	STRAIGHT	TIME BASE	M020	MANAGERS (GRADE 69 - 72)	R1005	RMRS Salaried		Linear	93.45 Hours
Factors	100	HOURS		0.67401 January 2000 Earne	ed Value Factor				
				T			T	1.38645 [SYS 06130	01 1.386448 - Target
750	STRAIGHT	TIME BASE	P080	HEALTH PHYSICISTS		RMRS Salaried		Linear	93.45 Hours
Factors	100	HOURS		0.67401 January 2000 Earne	ed Value Factor				
				I		1		1.38645 [SYS 06130	
750		TIME BASE	P090	INDUSTRIAL HYGIENISTS		RMRS Salaried		Linear	217.27 Hours
Factors	232.5	hours		0.67401 January 2000 Earne	ed Value Factor				
	T			T				1.38645 [SYS 06130	
750		TIME BASE	P170	OTHER ADMINISTRATIVE & P		RMRS Salaried		Linear	2.719.33lHours
Factors	2910	hours		0.67401 January 2000 Earne	ed Value Factor				<u>-</u>
	070410117		T 0.50		NO. 101 D. 100			1.38645 [SYS 06130	
750		TIME BASE	T050	RADIATION CONTROL TECHN		RMRS Salaried		Bell Shaped	93.28 Hours
Factors	80	h		0.84101 January 2000 Earne	ed value Factor			1.38645 [SYS 06130	01.4.000440 T+
A5C	SUPPLIES		S030	GEOLOGISTS	D1000	RMRS Salaried		Linear	1.896.99 Dollars
Factors	2000	DOLLARS	3030	1.015 FY00 Escalation -		0.67401 January 2000 Earned Va	luo Factor	Lilledi	1.090.99ID0IIais
ruciors	2000	DOLLARS		1:015 1 100 Escalation -	-	0.07401 January 2000 Lamed Val	iue i actoi	1.38645 [SYS 06130	01 1 386//8 - Target
A5H	SUBCONT	RACTED SRVS	G010	ADMINISTRATIVE ASSISTANT	TS R1009	RMRS Salaried		Linear	5.256.97 Dollars
Factors	5500	d	0010	1.02283 FY00 Escalation -		0.67401 January 2000 Earned Val	lue Factor	Linoai	0,200.01 Donard
1 401075	0000	<u> </u>				olo. To . Gallaal, 2000 Zallioa va		1.38645 [SYS 06130	01 1 386448 - Target
A5H	SUBCONT	RACTED SRVS	P070	COST ESTIMATORS PLANNE	RS AN R100S	RMRS Salaried		Linear	3.123.80 Dollars
Factors		p&i support		1.02283 FY00 Escalation -		0.67401 January 2000 Earned Val	lue Factor		
								1.38645 [SYS 06130	0] 1.386448 - Target
A5H	SUBCONT	RACTED SRVS	P150	TRAINERS	R1005	RMRS Salaried		Linear	1,911.62 Dollars
Factors	2000	dollars		1.02283 FY00 Escalation -		0.67401 January 2000 Earned Val	lue Factor		

1.38645 [SYS 061300] 1.386448 - Target

ACTIVITY ID: TEFE	Activity ID: 1EFB0195 Description: 903 Afea Cluster Landlord Functions, FY02											
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
01 - tJ3GE0110A	landlord support	1.00	each	HC	3.616	3.616	111.337	11.601	0	122.938	39.302	162.240
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	24.186	24.186	0	24.186
	Tot	al for Activi	ty 1EFB019	5:		3.616	111.337	11.601	24.186	147.124	39.302	186.426

Line Item 01 - tJ3GE0110AD - landlord support

BOE

Historical Data Source:

WAD number 83, 1.1.03.12.01, FY98 WADLET "Sep98" Spending Variance Reports "002a" located in the Planning & Intergration Reporting System. (Please note that actual costs were not collected at the line item level.)

Item Desc

Support for landlord functions, Conduct of Operations, Plan of the Day, radio communication with field activities and support of the contractor field activities. Property management and inventory of controlled items will be maintained. Maintenance and repair of the buildings will be provided by CSS and is not scoped or funded in this activity. This line item represents 100% of the labor hours and approximately 100% of the subcontract and supplies for the WADLet.

Breakdown of Historical Cost Data: Item: Operate 903/ 905 Contractor Yard

Units: 1 Lot

Unit Cost:

Wadlet - 3,644 Hours, \$49,722 Subcontracts and Supplies Line Item - 3,644 Hours, \$49,722 Subcontracts and Supplies

Unit Cost Adjustment Factor: 11.6% percent labor increase

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filter

Baseline Devl 1EFB

Starts In FY

74.4% Subcontract and Supplies decrease

Revised Unit Cost: 4,066 Hours, \$12,768 Subcontract and Supplies

Basis for adjustment:

- 1. Hours have been increased by approximately 11.6 percent due to additional support requirements necessary to properly provide oversight for the trailers and storage lockers in the yard.
- 2. Subcontract and supplies, a major portion of the reduction is due to Programmatic Support in FY99 being added as an additional line item. The operation of the contractor yard is attempting to provide more managerial and physical types of support and thus utilizing less supplies to meet objectives.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

s	Cost Element	Skill		Department	Curve	Ouantity Units
750	STRAIGHT TIME BASE	G010 ADMINISTRATIVE ASSISTANT	S R100S	RMRS Salaried	Linear	88.93 Hours
Factors	100 HOURS					
			1		0.88934 [SYS 0614	001 .88934200 - Svstem
750	STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	R100S	RMRS Salaried	Linear	88.93 Hours
Factors	100 HOURS					
						001 .88934200 - Svstem
750	STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	R100S	RMRS Salaried	Alternate Linear	482.91 Hours
Factors	543 hours					
						001 .88934200 - Svstem
750	STRAIGHT TIME BASE	P080 HEALTH PHYSICISTS	R100S	RMRS Salaried	Linear	88.93 Hours
Factors	100 HOURS					
	T	T I		T		001 .88934200 - Svstem
750	STRAIGHT TIME BASE	P090 INDUSTRIAL HYGIENISTS	R100S	RMRS Salaried	Linear	206.77 Hours
Factors	232.5 hours					
750	OTD A IOLIT TIME DAGE	DATE OTHER ADMINISTRATIVE & D	DOFF DAGGO	DMD0 0 1 : 1		001 .88934200 - Svstem
750	STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & P	ROFE R100S	RMRS Salaried	Linear	2.587.99 Hours
Factors	2910 hours				0.00004 10000.0044	001 0000 1000 - Contains
750	STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHN	IOLICI DAOOS	DMDC Coloried	0.88934 ISYS 0614 Bell Shaped	001 .88934200 - Svstem 71.15 Hours
Factors		1 1050 IRADIATION CONTROL TECHN	NOLIGI I R 1005	RIVIRS Salaried	Bell Snaped	/1.15IHours
raciors	80 11				0.88837 [275.0617	001 .88934200 - Svstem
A5C	SUPPLIES	S030 GEOLOGISTS	R100S	RMRS Salaried	Linear	1.805.36 Dollars
Factors	+	1.015 FY00 Escalation		TAIVITO CAIAITCA	Linear	1.000.00 20 413
1 delors	2000 20221110	1.010 1100 200444011			0.88934 [SYS.0614	001 .88934200 - Svstem
A5H	SUBCONTRACTED SRVS	G010 ADMINISTRATIVE ASSISTANT	S R100S	RMRS Salaried	Linear	5.003.05 Dollars
Factors	•	1.02283 FY00 Escalation				
					0.88934 [SYS 0614	001 .88934200 - System
A5H	SUBCONTRACTED SRVS	P070 COST ESTIMATORS PLANNE	RS AN R100S	RMRS Salaried	Linear	2.972.91 Dollars
Factors	3268.21 p&i support	1.02283 FY00 Escalation	_			
					0.88934 [SYS 0614	001 .88934200 - Svstem
A5H	SUBCONTRACTED SRVS	P150 TRAINERS	R100S	RMRS Salaried	Linear	1.819.29 Dollars
Factors	2000 dollars	1.02283 FY00 Escalation	-			
					0.88934 [SYS 0614	001 .88934200 - System

Line Item SYS - Contingency And Escalation

BOE

Resources

es	Cost Element			Skill		Department	Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	16.604.73	Dollars
	Factors	16604.7 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	7,581.70	Dollars
	г.	7504.7 D-II							

Factors 7581.7 Dollars

Activity ID: 1EFB0200 Description: 903 Area Cluster Landlord Functions, FY03 Cost Risk 1 Schedule Risk

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl 1EFB

							Acti	vitv Filter *		Ste	arts In FY *	
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
01 - tJ3GE0110AE landlord support		1.00	each	HC	3.616	3.616	111.337	11.601	0	122.938	38.523	161.460
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	44.652	44.652	0	44.652
To			ty 1EFB020	0:		3.616	111.337	11.601	44.652	167.590	38.523	206.113

Line Item 01 - tJ3GE0110AE - landlord support

BOE

Historical Data Source:

WAD number 83, 1.1.03.12.01, FY98 WADLET "Sep98" Spending Variance Reports "002a" located in the Planning & Intergration Reporting System. (Please note that actual costs were not collected at the line item level.)

Item Desc:

Support for landlord functions, Conduct of Operations, Plan of the Day, radio communication with field activities and support of the contractor field activities. Property management and inventory of controlled items will be maintained. Maintenance and repair of the buildings will be provided by CSS and is not scoped or funded in this activity. This line item represents 100% of the labor hours and approximately 100% of the subcontract and supplies for the WADLet.

Breakdown of Historical Cost Data: Item: Operate 903/ 905 Contractor Yard Units: 1 Lot

nit Cost:

Wadlet - 3,644 Hours, \$49,722 Subcontracts and Supplies Line Item - 3,644 Hours, \$49,722 Subcontracts and Supplies

Unit Cost Adjustment Factor: 11.6% percent labor increase
74.4% Subcontract and Supplies decrease

Revised Unit Cost: 4,066 Hours, \$12,768 Subcontract and Supplies

Basis for adjustment:

1. Hours have been increased by approximately 11.6 percent due to additional support requirements necessary to properly provide oversight for the trailers and storage lockers in the yard.

2. Subcontract and supplies, a major portion of the reduction is due to Programmatic Support in FY99 being added as an additional line item. The operation of the contractor yard is attempting to provide more managerial and physical types of support and thus utilizing less supplies to meet objectives.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department	Curve	Quantity Units
750 STRAIGHT TIME BASE	G010	ADMINISTRATIVE ASSISTANTS	R100S	RMRS Salaried	Linear	88.93 Hours
Factors 100 HOURS						
					0.88934 [SYS 06140	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	R100S	RMRS Salaried	Linear	88.93 Hours
Factors 100 HOURS						
	_				0.88934 [SYS 06140	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	R100S	RMRS Salaried	Alternate Linear	482.91 Hours
Factors 543 hours						
	1				0.88934 [SYS 06140	00] .88934200 - System
750 STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	R100S	RMRS Salaried	Linear	88.93 Hours
Factors 100 HOURS						
	1				0.88934 [SYS 06140	00] .88934200 - System
750 STRAIGHT TIME BASE	P090	INDUSTRIAL HYGIENISTS	R100S	RMRS Salaried	Linear	206.77 Hours
Factors 232.5 hours						
	_				0.88934 [SYS 06140	00] .88934200 - System
750 STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	2,587.99 Hours
Factors 2910 hours						
·					0.88934 [SYS 06140	001 .88934200 - Svstem

WBS No: 1EFB06 Baseline Devl Proiect Rocky Flats Closure Project 1EFB0200 Activity ID: WBS Filter 1EFB **Baseline Cost and Basis of Estimate** Activity Filter Starts In FY 750 STRAIGHT TIME BASE T050 RADIATION CONTROL TECHNOLIGI R100S RMRS Salaried 71.15 Hours Bell Shaped Factors 80 0.88934 [SYS 061400] .88934200 - System A5C S030 GEOLOGISTS R100S RMRS Salaried 1.805.36 Dollars SUPPLIES Linear 2000 DOLLARS 1.015 -- FY00 Escalation --Factors 0.88934 [SYS 061400] .88934200 - System R100S RMRS Salaried 5.003.05 Dollars A5H SUBCONTRACTED SRVS G010 ADMINISTRATIVE ASSISTANTS Linear 5500 d 1.02283 -- FY00 Escalation --Factors 0.88934 [SYS 061400] .88934200 - System SUBCONTRACTED SRVS P070 COST ESTIMATORS PLANNERS AN R100S RMRS Salaried Linear 2.972.91 Dollars 3268.21 p&i support 1.02283 -- FY00 Escalation --Factors 0.88934 [SYS 061400] .88934200 - System P150 TRAINERS R100S RMRS Salaried 1.819.29 Dollars A5H SUBCONTRACTED SRVS Linear Factors 2000 dollars 1.02283 -- FY00 Escalation --0.88934 [SYS 061400] .88934200 - System Line Item SYS - Contingency And Escalation BOE Cost Floment \$\int_{i11} Unite Resources 32,270,72 Dollars CON CONTINGENCY 0000 NONE ZDEPT No Department Linear Factors 32270.7 Dollars ESC ESCALATION ZDEPT No Department 12.381.63 Dollars 0000 NONE Linear Factors 12381.6 Dollars East Sewage Trtmnt Cluster Landlord WBS No: 1EFB07 Activity ID: 1EFB0205 Description: East Sewage Trtmnt Cluster L/L Functions, FY00 Cost Risk 1 Schedule Risk BOELabor Hours Labor Cost Materials/ Sub Total Prime Total Cost Line Item Description **Ouantity** Units Labor Contingency Burden Cost Type Hours/Unit Total Cost & Escalation Total Cost Landlord functions (Interceptor Trench.PU&D.Teller HC 9.636 001 1.00 ea 180 180 16.903 0 26.539 4.702 31.242 CLEANUP 002 1.00 each HC 187 187 4.965 25.807 0 30.771 2.423 33.194 IBCCER0001a Perform Landlord Support Functions 1.00 ea HC 527 527 11.943 15.855 0 27.799 5.828 33.627 IBCEER0001b H20SIZ Cluster Landlord 1.00 ls EE 115 115 2.788 210 0 2.999 1.361 4.360 SSL1c Sanitary Sewer Collection System 1.00 each FF 546 546 11.797 0 0 11.797 5.757 17.554 Total for Activity 1EFB0205: 1.555 41.129 58.776 0 99.905 20.071 119.976 Line Item 001 - Landlord functions (Interceptor Trench, PU&D, Teller Historical Data Source: BOE The historical data is the FY98 Work Plan and similar actual costs through September 1998. The FY98 Work Plan was based on previous years experience for the same activities at Rocky Flats. Based on the number of subcontract dollars and project management hours used to achieve the FY00 scope. Project costs include A5H costs to remove materials and decontaminate as necessary, costs for transporting materials to the PU&D yard or other designated disposal or storage area, project manager's hours for subcontractor oversight, and for performing PPRs and project and Budget reviews.

Historical Data Source -Item Desc -

Breakdown of Historical Data: Item - Landlord Support

item - Landiord Support

Units - 1 lot Unit Cost - NA

Unit Cost - NA

Unit Cost Adjustment factor - NA

Revised Unit Cost - NA

Basis for adjustment - NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources Cost Element Skill Department Curve Quantity Units

STRAIGHT TIME BASE

Rocky Flats Closure Project **Baseline Cost and Basis of Estimate**

Baseline Devl Proiect WBS Filter 1EFB

Activity Filter Starts In FY R100S RMRS Salaried 180.28 Hours Linear

Factors 360 Hours 0.3612 May 2000 Earned Value Factor

1.38645 [SYS 061300] 1.386448 - Target SUBCONTRACTED SRVS 0000 NONE R100S RMRS Salaried 14.342.10 Dollars A5H Linear

28000 Dollars 1.02283 -- FY00 Escalation --0.3612 May 2000 Earned Value Factor Factors

M020 MANAGERS (GRADE 69 - 72)

1.38645 [SYS 061300] 1.386448 - Target A5H SUBCONTRACTED SRVS 2.561.09 Dollars 0000 NONE R100S RMRS Salaried Linear

Factors 5000 Dollars 1.02283 -- FY00 Escalation --0.3612 May 2000 Earned Value Factor

1.38645 [SYS 061300] 1.386448 - Target

BOE

Line Item 002 - CLEANUP

Historical Data Source:

The historical data is the FY98 Work Plan and similar actual costs through September 1998. The FY98 Work Plan was based on previous years experience for the same activities at Rocky Flats.

750

Based on the number of subcontract dollars and project management hours used to achieve the FY00 scope. Project costs include A5H costs to remove materials and decontaminate as necessary, costs for transporting materials to the PU&D yard or other designated disposal or storage area, project manager's hours for subcontractor oversight, and for performing PPRs and project and Budget reviews.

Historical Data Source -

Item Desc -

Breakdown of Historical Data:

Item - Landlord Support

Units - 1 lot

Unit Cost - NA

Unit Cost Adjustment factor - NA

Cost Flement

Revised Unit Cost - NA

Basis for adjustment - NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Skill

Resources

750 STRAIGHT TIME BASE E050 ENVIRONMENTAL ENGINEERS R100S RMRS Salaried Linear Factors 20 HOURS 0.67401 January 2000 Earned Value Factor						
Factors 20 HOURS 0.67401 January 2000 Earned Value Factor	18.69 Hours					
1,38645 [SYS 061300] 1,386448 - Target						

Department

P170 OTHER ADMINISTRATIVE & PROFE R100S RMRS Salaried 168.21 Hours 750 STRAIGHT TIME BASE Linear 180 0.67401 January 2000 Earned Value Factor Factors HOURS

1.38645 [SYS 061300] 1.386448 - Target A5H SUBCONTRACTED SRVS 0000 NONE R100S RMRS Salaried 25 806 93 Dollars Linear Factors 27000 DOLLARS 1.02283 -- FY00 Escalation --0.67401 January 2000 Earned Value Factor

Line Item IBCCER0001a - Perform Landlord Support Functions

1.38645 [SYS 061300] 1.386448 - Target

Quantity

Unite

Curve

BOE

Historical Data Source:

The historical data is the FY98 Work Plan and the actual costs through April 1998. The FY98 Work Plan was based on previous years experience for the same activities at Rocky Flats.

Item Desc:

THE LANDLORD FUNCTIONS ASSOCIATED WITH MAINTAINING THE REETS OUTER BUFFER ZONE (SBZ) AND CONTINUING ROUTINE NPDES STORM WATER MONITORING OPERATIONS CONSISTS OF THE FOLLOWING ACTIVITIES IN FY98:

- 1. PROVIDE AND MAINTAIN ELECTRICAL POWER TO ESTABLISHED SAMPLING STATIONS,
- 2. MAINTAINING BUFFER ZONE FIRE BREAKS, AND
 3. MAINTAINING ROADS TO PROVIDE DAILY ACCESS TO ENVIRONMENTAL MONITORING OPERATIONS.,

Breakdown of Historical Data:

Item:

- 1. ER Project (R217S)
- Environmental Engineer (Inspection, verification and reporting 1 manager x60 hrs)
- 2. ER Project (R217S)
- PROJECT MANAGEMENT Coordination, IWCP, PODs 1 manager x75hrs)
- 3.Leased Labor Maintenance (213H)

Page 141 of 388 6/23/00 11:24:59 AM OFFICIAL USE ONLY WBS No: 1EFB07 1EFB0205 Activity ID:

Rocky Flats Closure Project Baseline Cost and Basis of Estimate Proiect WBS Filter Baseline Devl 1EFB

Activity Filter Starts In FY * Electricians PROVIDE FOR ELECTRICITY, REPAIR AND MAINTENANCE OF POWER LINES TO ENVIRONMENTAL MONITORING STATIONS(2 electricians x 9 days x 9 hrs) + (\$0.08 $kwh \times 37,500 kwh)$. 4. Leased Labor Maintenance (213H) Heavy equipment operators SNOW PLOWING OF PRIMARY BUFFER ZONE ROADS DURING HEAVY SNOW FALLS, AND GRADING TO MAINTAIN ROAD SURFACES (2 operators x 27 hrs x 8 events)+(1 labor x 27 hrs x 8 events) + (2400 gal x \$1.00/gal). 5. Leased Labor Maintenance (213H) Mission Support Specialists CLEAR AND MAINTAIN FIRE BREAK ROADS 2 EVENTS PER YEAR(2 operators x 27 hrs x 2 events)+(1 labor x 27 hrs x 2 events)+(600 gal x \$1.00/gal). 6. Leased Labor Maintenance (213H) Landlord support activities A5C supplies \$ 6,000.00 dollars. Unit Cost Adjustment factor: 1) NA 2) NA 3) NA 4) NA 5) NA 6) NA

Basis for adjustment:

- 1) NA 2) NA 3) NA 4) NA
- 5) NA 6) NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

S	Cost Element	Skill	Department Department Department	Curve	Ouantity Units
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	81.13 Hours
Factor	s 162 Hours	0.3612 May 2000 Earned Value Fa	actor		
				1.38645 [SYS 0613	001 1.386448 - Target
750	STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	R100S RMRS Salaried	Linear	30.05 Hours
Factor	s 60 Hours	0.3612 May 2000 Earned Value Fa	actor		
				1.38645 ISYS 0613	001 1 386448 - Target
750	STRAIGHT TIME BASE	L050 MISSION SUP SPEC I (CBLFAB.DSP	KE10H Indust/Site Srvs Steelworkers	Linear	54.08 Hours
Factor	s 108 Hours	0.3612 May 2000 Earned Value Fa	actor		
_				1.38645 [SYS 0613	001 1.386448 - Target
750	STRAIGHT TIME BASE	L070 MISSION SUP SPEC III	KE10H Indust/Site Srvs Steelworkers	Linear	324.51 Hours
Factor	s 648 Hours	0.3612 May 2000 Earned Value Fa	actor		
				1.38645 [SYS 0613	001 1.386448 - Target
750	STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	R100S RMRS Salaried	Linear	37.56 Hours
Factor	s 75 Hours	0.3612 May 2000 Earned Value Fa	actor		
				1.38645 [SYS 0613	001 1.386448 - Target
A5C	SUPPLIES	0000 NONE	C211S Electrical Maintenance	Linear	3.049.78 Dollars
Factor	s 6000 Dollars	1.015 FY00 Escalation	0.3612 May 2000 Earned Value Factor		
				1.38645 [SYS 0613	001 1.386448 - Target
A5H	SUBCONTRACTED SRVS	0000 NONE	R100S RMRS Salaried	Linear	12.805.45 Dollars
Factor	s 25000 Dollars	1.02283 FY00 Escalation	0.3612 May 2000 Earned Value Factor		

Line Item IBCEER0001b - H20SIZ Cluster Landlord

BOE

BOE NARRATIVE:

- 1. PROVIDE FOR ELECTRICITY, REPAIR AND MAINTENANCE OF POWER LINES TO ENVIRONMENTAL MONITORING STATIONS(2 electricians x 3 days x 9 hrs) + (\$0.08 kwh x 12,500
- 2. CLEAR AND MAINTAIN FIRE BREAK ROADS 2 EVENTS PER YEAR(2 operators x 9 hrs x 2 events)+(1 labor x 9 hrs x 2 events)+(200 gal x \$1.00/gal).
- 3. SNOW PLOWING OF PRIMARY BUFFER ZONE ROADS DURING HEAVY SNOW FALLS, AND GRADING TO MAINTAIN ROAD SURFACES(2 operators x 9 hrs x 8 events)+(1 labor x 9 hrs x 8 events) + (800 gal x \$1.00/gal).

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1.38645 [SYS 061300] 1.386448 - Target

WBS No: 1EFB07 1EFB0205 Activity ID:

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Activity Filter Baseline Devl 1EFB

Starts In FY

4. PROJECT MANAGEMENT AND (Coordination, IWCP, PODs - 1 manager x25hrs)
5. Environmental Engineer (Inspection, verification and reporting - 1 manager x20 hrs)

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

s	Cost Element		Skill		Department	Curve	Ouantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	27.04	Hours
Factors	54 Hours		0.3612 May 2000 Earned Value Fac	tor				
						1.38645 [SYS 061300)] 1.386448 - Ta	araet
750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	R100S	RMRS Salaried	Linear	10.02	Hours
Factors	20 Hours		0.3612 May 2000 Earned Value Fac	tor				
						1.38645 [SYS 061300)] 1.386448 - Ta	araet
750	STRAIGHT TIME BASE	L050	MISSION SUP SPEC L (CBL FAB. DSP.	KE10H	Indust/Site Srvs Steelworkers	Linear	45.07	Hours
Factors	90 Hours		0.3612 May 2000 Earned Value Fac	tor				
						1.38645 [SYS 061300)] 1.386448 - Ta	araet
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	R100S	RMRS Salaried	Linear	12.52	Hours
Factors	25 Hours		0.3612 May 2000 Earned Value Fac	tor				
						1.38645 [SYS 061300)] 1.386448 - Ta	araet
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KE10H	Indust/Site Srvs Steelworkers	Linear	20.03	Hours
Factors	40 Hours		0.3612 May 2000 Earned Value Fac	tor				
						1.38645 [SYS 061300)] 1.386448 - Ta	araet
A5C	SUPPLIES	0000	NONE	R100S	RMRS Salaried	Linear	210.43	Dollars

414 Line Item SSL1c - Sanitary Sewer Collection System

Factors

1.38645 [SYS 061300] 1.386448 - Target

BOE

Estimators Experience - Frank Huffman has approximately twenty years experience in the operations of Sewage Treatment Plants. Plant experience equalls ten years. Local municipalities experience equalls ten plus years. Backup information is located in B995, contact Mr. Frank Huffman extension 6290.

0.3612 May 2000 Earned Value Factor

Experience Item Desc - Sewage Treatment Plant Operations

Breakdown of Cost Data:

Item - Plant Sewer Lines Evalution

Dollars

Units - 1 Lot

Unit Cost - \$ 45K

Unit Cost Adjustment factor - NA

Revised Unit Cost - NA

Basis for adjustment -NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

1.015 -- FY00 Escalation --

Resources

es	Cost Element	Skill		Department	Curve	Ouantity Uni	its
	750 STRAIGHT TIME BASE	P060 COMPUTER SYSTEMS ANALYST	R100S	RMRS Salaried	Linear	51.08 Hours	S
	Factors 102 Hours	0.3612 May 2000 Earned Value	Factor				
					1.38645 [SYS 06130	01 1.386448 - Target	
	750 STRAIGHT TIME BASE	R070 WASTE TREATMENT OPERATOR	A KE10H	Indust/Site Srvs Steelworkers	Linear	332.27 Hours	S
	Factors 663.5 Hours	0.3612 May 2000 Earned Value	Factor				
					1.38645 [SYS 06130	01 1.386448 - Target	
Į	750 STRAIGHT TIME BASE	T070 MAINT, TECHS, (INSTRUMENT TE	C KE10H	Indust/Site Srvs Steelworkers	Linear	162.76 Hours	s
	Factors 325 Hours	0.3612 May 2000 Farned Value	Factor				

Description: East Sewage Trtmnt Cluster L/L Functions, FY01

1.38645 [SYS 061300] 1.386448 - Target Cost Risk 1 Schedule Risk

ACTIVITY ID. ILI	Description. Last ocwarde Trainit Glaster	L/L I dilotte	3113, 1 101	Cost Risk 1 Schedule Risk 1								
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
001	Landlord functions (Interceptor Trench.PU&D.Teller	1.00	ea	HC	320	320	17.113	30.018	0	47.131	8.163	55.294
002	CLEANUP	1.00	each	HC	178	178	9.082	24.560	0	33.643	4.332	37.975
IBCCER0001a	Perform Landlord Support Functions	1.00	ea	HC	936	936	21.210	28.157	0	49.367	10.117	59.484
IBCEER0001b	H20SIZ Cluster Landlord	1.00	Is	EE	204	204	4.915	374	0	5.288	2.344	7.633

Rockv Flats Closure Project

Baseline Cost and Basis of Estimate

Project

WBS Filter

Activity Filter

*

Baseline Devl

HEFB

			Daseille	COSt and	u Dasis Oi E	Sumate	Activit	v Filter *		Sta	rts In FY *	
SSL1c	Sanitary Sewer Collection System		1.00 each	EE	970	970	20.661	0	0	20.661	9.855	30.516
SYS	Contingency And Escalation		1.00 ea	EE	0	0	0	0	10.099	10.099	0	10.099
		Total for Activity 1FFB0210			2 608	72 980	83 110	10 099	166 189	34 812	201 000	

Line Item 001 - Landlord functions (Interceptor Trench, PU&D, Teller

BOE

WBS No:

Activity ID:

Historical Data Source:
The historical data is the FY98 Work Plan and similar actual costs through September 1998. The FY98 Work Plan was based on previous years experience for the same activities at Rocky Flats.

Item Desc:

1EFB07

1EFB0210

Based on the number of subcontract dollars and project management hours used to achieve the FY00 scope. Project costs include A5H costs to remove materials and decontaminate as necessary, costs for transporting materials to the PU&D yard or other designated disposal or storage area, project manager's hours for subcontractor oversight, and for performing PPRs and project and Budget reviews.

Historical Data Source Item Desc Breakdown of Historical Data:
Item - Landlord Support
Units - 1 lot
Unit Cost - NA
Unit Cost Adjustment factor - NA
Revised Unit Cost - NA
Basis for adjustment - NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es		Cost Element	Skill	Department	Curve	Quantity Units
	750	STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	R100S RMRS Salaried	Linear	320.16 Hours
	Factors	360 Hours				

					0.88934 [SYS 06	1400] .88934200 - System
A5H SUBCONTRACTED SRVS	0000	NONE	R100S	RMRS Salaried	Linear	4,548.23 Dollars

Factors 5000 Dollars 1.02283 -- FY00 Escalation --

						0.88934 [SYS 06140	0] .88934200 - System
A5H	SUBCONTRACTED SRVS	0000	NONE	R100S	RMRS Salaried	Linear	25,470.08 Dollars

Factors 28000 Dollars 1.02283 -- FY00 Escalation --

Line Item 002 - CLEANUP

BOE

Historical Data Source:

The historical data is the FY98 Work Plan and similar actual costs through September 1998. The FY98 Work Plan was based on previous years experience for the same activities at Rocky Flats.

Item Desc

Based on the number of subcontract dollars and project management hours used to achieve the FY00 scope. Project costs include A5H costs to remove materials and decontaminate as necessary, costs for transporting materials to the PU&D yard or other designated disposal or storage area, project manager's hours for subcontractor oversight, and for performing PPRs and project and Budget reviews.

Historical Data Source Item Desc Breakdown of Historical Data:
Item - Landlord Support
Units - 1 lot
Unit Cost - NA
Unit Cost - NA
Unit Cost adjustment factor - NA
Revised Unit Cost - NA
Basis for adjustment - NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

s			Cost Element		Skill		Department	Curve	Quantity	Units
	750	STRAIGH	HT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	R100S	RMRS Salaried	Linear	17.79	Hours
	Factors	20	HOURS							

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0.88934 [SYS 061400] .88934200 - System

0.88934 [SYS 061400] .88934200 - System

WBS No: 1EFB07 Baseline Devl Proiect **Rocky Flats Closure Project** Activity ID: 1EFB0210 WBS Filter 1EFB **Baseline Cost and Basis of Estimate** Activity Filter

750	STRAIGH	IT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	R100S	RMRS Salaried	Linear	160.08 Hours
Factors	180	HOURS	•			•		

0.88934 [SYS 061400] .88934200 - System R100S RMRS Salaried 24.560.43 Dollars 0000 NONE A5H SUBCONTRACTED SRVS

27000 DOLLARS 1.02283 -- FY00 Escalation --Factors

0.88934 [SYS 061400] .88934200 - System

Starts In FY

0.88934 [SYS 061400] .88934200 - System

Line Item IBCCER0001a - Perform Landlord Support Functions

BOE

Historical Data Source:

The historical data is the FY98 Work Plan and the actual costs through April 1998. The FY98 Work Plan was based on previous years experience for the same activities at Rocky Flats.

THE LANDLORD FUNCTIONS ASSOCIATED WITH MAINTAINING THE RFETS OUTER BUFFER ZONE (SBZ) AND CONTINUING ROUTINE NPDES STORM WATER MONITORING OPERATIONS CONSISTS OF THE FOLLOWING ACTIVITIES IN FY98:

- 1. PROVIDE AND MAINTAIN ELECTRICAL POWER TO ESTABLISHED SAMPLING STATIONS,
- 2. MAINTAINING BUFFER ZONE FIRE BREAKS, AND
- 3. MAINTAINING ROADS TO PROVIDE DAILY ACCESS TO ENVIRONMENTAL MONITORING OPERATIONS.,

Breakdown of Historical Data:

Item:

1. ER Project (R217S)

Environmental Engineer (Inspection, verification and reporting - 1 manager x60 hrs)

2. ER Project (R217S)

PROJECT MANAGEMENT Coordination, IWCP, PODs - 1 manager x75hrs)

3.Leased Labor Maintenance (213H)

Electricians PROVIDE FOR ELECTRICITY, REPAIR AND MAINTENANCE OF POWER LINES TO ENVIRONMENTAL MONITORING STATIONS(2 electricians x 9 days x 9 hrs) + (\$0.08 $kwh \times 37,500 kwh)$.

4. Leased Labor Maintenance (213H)

Heavy equipment operators SNOW PLOWING OF PRIMARY BUFFER ZONE ROADS DURING HEAVY SNOW FALLS, AND GRADING TO MAINTAIN ROAD SURFACES(2 operators x 27 hrs x 8 events)+(1 labor x 27 hrs x 8 events) + (2400 gal x \$1.00/gal).

5. Leased Labor Maintenance (213H)

Mission Support Specialists CLEAR AND MAINTAIN FIRE BREAK ROADS 2 EVENTS PER YEAR(2 operators x 27 hrs x 2 events)+(1 labor x 27 hrs x 2 events)+(600 gal x \$1.00/gal).

6. Leased Labor Maintenance (213H)

Landlord support activities A5C supplies \$ 6,000.00 dollars.

Unit Cost Adjustment factor:

- 1) NA 2) NA 3) NA
- 4) NA
- 5) NA
- 6) NA

Basis for adjustment:

- 1) NA 2) NA
- 3) NA
- 4) NA
- 5) NA
- 6) NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

3	C	ost Element		Skill		Department	Curve	Ouantity	Units
750	STRAIGH	TTIME BASE	C020	ELECTRICIANS	C211S	Electrical Maintenance	Linear	144.07	Hours
Factors	162	Hours							

<u></u>		0.88934 [SYS 061400] .88934200 - Svstem
750 STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS R100S RMRS Salaried	Linear 53.36 Hours
Factors 60 Hours		

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Too STRAIGHT TIME BASE	WBS No: Activity ID:	1EFB07 1EFB0210			s Closure Proiect and Basis of Estimate	Proiect WBS Filter Activity Filter	Baseline Devl 1EFB	Starts In FY *			
1.00		750 STRAIGHT TIME BASE	L050 MISSI	ON SUP SPEC I (CBLFAB.DSF	P. C211S Electrical Maintenance	Activity I tite!	Linear				
Too		Factors 108 Hours					·				
Total STRAIGHTIME RASE		750 OTDAIOUT TIME DAGE	1.070 1.41001	ON OUR OREO III	00440 51 184						
Title Transport Title Transport Title Titl		`	I LO70 IMISSI	ON SUP SPEC III	C211S Electrical Maintenance		Linear	5/6.29IHours			
Table Strangert Time Rase		ructors 040 Hours					0.88934 [SYS 0614	4001 88934200 - System			
ASC SUPPLIES		750 STRAIGHT TIME BASE	M020 MANA	GERS (GRADE 69 - 72)	R100S RMRS Salaried						
ASC SUPPLIES		Factors 75 Hours					0.00004 [0)/0.004	400] 00004000 Contains			
Factor 100 Deliars 1.015 FY00 Escalation		AFC SLIDDLIES	0000 NONE		C211S Electrical Maintenance						
ASH SUBCONTRACTED SRYS 0000 NONE R100S RMRS Salaried 0.88934 ISYS 0614001.88934200 - System Factor 2000 Dollars 1.02283 - FY00 Escalation **BILL CONTRACTED SRYS 0.000 NONE R100S RMRS Salaried 0.88934 ISYS 0614001.88934200 - System 0.88934 ISYS 0614					C2113 Liectrical Maintenance		Lilical	3.410.09ID0IIa1S			
ASH SUBCONTRACTED SRVS 000 NONE R100S RMRS Salaried Linear 2.741.14 Dollars		Tacions Cook Bollaro	1.01	o i roo Essaidiisii			0.88934 [SYS 0614	4001 .88934200 - Svstem			
BOE NARSATIVE:		A5H SUBCONTRACTED SRVS	0000 NONE		R100S RMRS Salaried						
### Stock Interception Process		Factors 25000 Dollars	1.02	283 FY00 Escalation							
	e Item IBO BOE	BOE NARRATIVE:	O AND MATNITUDIA	IGE OF DOMED LINES TO BE	WALTED DAMESTERS AND THE CHARLES	ONG (2) all article					
Resources Coat Element Skill Department Curve Outsite Units		3. SNOW PLOWING OF PRIMARY BUFFER x 8 events) + (800 gal x \$1.00/ga 4. PROJECT MANAGEMENT AND (Coordi	ZONE ROADS DUF L). nation,IWCP,POI	RING HEAVY SNOW FALLS, A Os - 1 manager x25hrs)	AND GRADING TO MAINTAIN ROAD	SURFACES(2 op	erators x 9 hrs x 8	3 events)+(1 labor x 9 h			
T50 STRAIGHT TIME BASE C020 ELECTRICIANS Electrical Maintenance Linear 48.02 Hours		This estimate includes a project	productivity/ef	ficiency factor for con	mmitted but as yet undefined	cost reductio	ns.				
T50 STRAIGHT TIME BASE C020 ELECTRICIANS Electrical Maintenance Linear 48.02 Hours	Resources	Cost Flement		Skill	Department		Curve	Quantity Units			
Factors 54 Hours			C020 ELEC								
T50 STRAIGHT TIME BASE L050 MISSION SUP SPECI (CBLFAB.DSP. C211S Electrical Maintenance Linear 17.79 Hours		Factors 54 Hours									
### Factors 20 Hours T50 STRAIGHT TIME BASE L050 MISSION SUP SPECI (CBLFAB,DSP. C211S Electrical Maintenance Linear 80,04Hours		ZEO CTRAICHT TIME DACE	FOEO FNIVIE	CONMENTAL ENGINEERS	DAGOS DMDS Salariad						
T50 STRAIGHT TIME BASE L050 MISSION SUP SPECI (CBLFAB.DSP. C211S Electrical Maintenance Linear 80.04 Hours 80.04 Hours 90 Hours 0.88934 [SYS 061400] .88934200 - System 1.050 STRAIGHT TIME BASE L070 MISSION SUP SPECI II R100S RMRS Salaried Linear 35.57 Hours 80.88934 [SYS 061400] .88934200 - System 1.050 STRAIGHT TIME BASE L070 MISSION SUP SPECI III R100S RMRS Salaried Linear 35.57 Hours 80.88934 [SYS 061400] .88934200 - System 1.050 STRAIGHT TIME BASE M020 MANAGERS (GRADE 69 - 72) R100S RMRS Salaried Linear 22.23 Hours 80.88934 [SYS 061400] .88934200 - System 1.050 STRAIGHT TIME BASE M020 MANAGERS (GRADE 69 - 72) R100S RMRS Salaried Linear 23.73.71 Dollars 80.88934 [SYS 061400] .88934200 - System 1.050 STRAIGHT TIME BASE M020 MANAGERS (GRADE 69 - 72) R100S RMRS Salaried Linear 37.3.71 Dollars 80.88934 [SYS 061400] .88934200 - System 1.050 STRAIGHT TIME BASE M020 MANAGERS (GRADE 69 - 72) R100S RMRS Salaried Linear 37.3.71 Dollars 80.88934 [SYS 061400] .88934200 - System 1.050 STRAIGHT TIME BASE M020 MANAGERS (GRADE 69 - 72) R100S RMRS Salaried Linear 37.3.71 Dollars 80.88934 [SYS 061400] .88934200 - System 1.050 STRAIGHT TIME BASE M020 MANAGERS (GRADE 69 - 72) R100S RMRS Salaried Linear 37.3.71 Dollars 80.88934 [SYS 061400] .88934200 - System 1.050 STRAIGHT TIME BASE M020 MANAGERS (GRADE 69 - 72) R100S RMRS Salaried Linear 37.3.71 Dollars 80.88934 [SYS 061400] .88934200 - System 1.050 STRAIGHT TIME BASE M020 MANAGERS (GRADE 69 - 72) R100S RMRS Salaried Linear 37.3.71 Dollars 80.88934 [SYS 061400] .88934200 - System 1.050 STRAIGHT TIME BASE M020 MANAGERS (GRADE 69 - 72) R100S RMRS Salaried Linear 1.050 STRAIGHT TIME BASE M020 SR934200 - System 1.050 STRAIGHT TIME BASE M020 SR934200 -			I EUOU IEINVIR	ONWENTAL ENGINEERS	R 1005 Rivirs Salaried		Linear	17.79Inouis			
Factors 90 Hours To STRAIGHT TIME BASE L070 MISSION SUP SPEC III R100S RMRS Salaried Linear 35.57 Hours							0.88934 [SYS 0614	400] .88934200 - System			
750 STRAIGHT TIME BASE L070 MISSION SUP SPEC III R100S RMRS Salaried Linear 35.57 Hours Factors 40 Hours 750 STRAIGHT TIME BASE M020 MANAGERS (GRADE 69 - 72) R100S RMRS Salaried Linear 22.23 Hours Factors 25 Hours A5C SUPPLIES 0000 NONE R100S RMRS Salaried Linear 373.71 Dollars Factors 414 Dollars 1.015 FY00 Escalation **Eltem SSL1c - Sanitary Sewer Collection System** 80E Estimators Experience - Frank Huffman has approximately twenty one years experience in the operations of Sewage Treatment Plants. Plant experience equal ten years. Local municipalities experience equalls ten plus years. Backup information is located in B995, contact Mr. Frank Huffman extension 6290. Experience Item Desc - Sewage Treatment Plant Operations Breakdown of Cost Data: Item - Sewer Lines Inspection PA Zone Buildings Units - 1 Lot Unit Cost - \$ 45K		750 STRAIGHT TIME BASE	L050 MISSI	ON SUP SPEC I (CBLFAB,DSF	P. C211S Electrical Maintenance		Linear	80.04 Hours			
Factors 40 Hours Total Straight Time Base Loro Mission Sup Spec III R100s RMRS Salaried Linear 35.57 Hours		Factors 90 Hours					0.99034 [SVS 061.	4001 99024200 Syntom			
Factors 40 Hours Too STRAIGHT TIME BASE M020 MANAGERS (GRADE 69-72) R100S RMRS Salaried Linear 22.23 Hours		750 STRAIGHT TIME BASE	LOZO MISSI	ON SLIP SPEC III	R100S RMRS Salaried						
Factors 25 Hours A5C SUPPLIES 0000 NONE R100S RMRS Salaried Linear 22.23 Hours Factors 414 Dollars 1.015 FY00 Escalation Eltem SSL 1c - Sanitary Sewer Collection System Estimators Experience - Frank Huffman has approximately twenty one years experience in the operations of Sewage Treatment Plants. Plant experience equaten years. Local municipalities experience equalls ten plus years. Backup information is located in B995, contact Mr. Frank Huffman extension 6290. Experience Item Desc - Sewage Treatment Plant Operations Breakdown of Cost Data: Item - Sewer Lines Inspection PA Zone Buildings Units - 1 Lot Unit Cost - \$ 45K			LOTO INICON	ON OOF OF LOTH	1 1000 Ninto Galarieu						
Factors 25 Hours A5C SUPPLIES 0000 NONE R100S RMRS Salaried Linear 373.71 Dollars Factors 414 Dollars 1.015 FY00 Escalation B10E Estimators Experience - Frank Huffman has approximately twenty one years experience in the operations of Sewage Treatment Plants. Plant experience equal ten years. Local municipalities experience equals ten plus years. Backup information is located in B995, contact Mr. Frank Huffman extension 6290. Experience Item Desc - Sewage Treatment Plant Operations Breakdown of Cost Data: Item - Sewer Lines Inspection PA Zone Buildings Units - 1 Lot Unit Cost - \$ 45K		750 OTDAIOUT TIME DAGE	14000 144444	OFDO (ODADE 00 70)	D4000 D400 0 1 : 1						
A5C SUPPLIES 0000 NONE R100S RMRS Salaried Linear 373.71 Dollars Factors 414 Dollars 1.015 FY00 Escalation Be Item SSL1c - Sanitary Sewer Collection System Estimators Experience - Frank Huffman has approximately twenty one years experience in the operations of Sewage Treatment Plants. Plant experience equal ten years. Local municipalities experience equals ten plus years. Backup information is located in B995, contact Mr. Frank Huffman extension 6290. Experience Item Desc - Sewage Treatment Plant Operations Breakdown of Cost Data: Item - Sewer Lines Inspection PA Zone Buildings Units - 1 Lot Unit Cost - \$ 45K			I MU20 IMANA	GERS (GRADE 69 - 72)	R100S RMRS Salaried		Linear	22.23 Hours			
A5C SUPPLIES 0000 NONE R100S RMRS Salaried Linear 373.71 Dollars Factors 414 Dollars 1.015 FY00 Escalation 0.88934 [SYS 061400] .88934200 - System E Item SSL1c - Sanitary Sewer Collection System Estimators Experience - Frank Huffman has approximately twenty one years experience in the operations of Sewage Treatment Plants. Plant experience equation ten years. Local municipalities experience equalls ten plus years. Backup information is located in B995, contact Mr. Frank Huffman extension 6290. Experience Item Desc - Sewage Treatment Plant Operations Breakdown of Cost Data: Item - Sewer Lines Inspection PA Zone Buildings Units - 1 Lot Unit Cost - \$ 45K		ructors 25 Hours					0.88934 [SYS 0614	4001 .88934200 - System			
Factors 414 Dollars 1.015 FY00 Escalation 0.88934 [SYS 061400] .88934200 - System 1.015 FY00 Escalation 0.88934 [SYS 061400] .88934200 - Syst		A5C SUPPLIES	0000 NONE		R100S RMRS Salaried						
Estimators Experience - Frank Huffman has approximately twenty one years experience in the operations of Sewage Treatment Plants. Plant experience equaten years. Local municipalities experience equals ten plus years. Backup information is located in B995, contact Mr. Frank Huffman extension 6290. Experience Item Desc - Sewage Treatment Plant Operations Breakdown of Cost Data: Item - Sewer Lines Inspection PA Zone Buildings Units - 1 Lot Unit Cost - \$ 45K		Factors 414 Dollars									
ten years. Local municipalities experience equalls ten plus years. Backup information is located in B995, contact Mr. Frank Huffman extension 6290. Experience Item Desc - Sewage Treatment Plant Operations Breakdown of Cost Data: Item - Sewer Lines Inspection PA Zone Buildings Units - 1 Lot Unit Cost - \$ 45K	e Item SS										
Breakdown of Cost Data: Item - Sewer Lines Inspection PA Zone Buildings Units - 1 Lot Unit Cost - \$ 45K	воЕ										
Item - Sewer Lines Inspection PA Zone Buildings Units - 1 Lot Unit Cost - \$ 45K		Experience Item Desc - Sewage Tre	atment Plant Or	perations							
		Item - Sewer Lines Inspection PA Units - 1 Lot	Zone Buildings	3							

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Rocky Flats Closure Project Baseline Cost and Basis of Estimate Proiect WBS Filter Activity Filter Baseline Devl 1EFB

Starts In FY *

Revised Unit Cost - NA Basis for adjustment -NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

s		Cost Element	Skill	Department	Curve	Quantity	Units
L	750	STRAIGHT TIME BASE	R070 WASTE TREATMENT OPERATOR A	R100S RMRS Salaried	Linear	590.08	Hours

663.5 Hours Factors

0.88934 [SYS 061400] .88934200 - System T070 MAINT, TECHS, (INSTRUMENT TEC | R100S RMRS Salaried 750 STRAIGHT TIME BASE Linear 289.04 Hours

Factors 325 Hours

0.88934 [SYS 061400] .88934200 - System T070 MAINT, TECHS, (INSTRUMENT TEC R100S RMRS Salaried STRAIGHT TIME BASE 90 71 Hours Linear

Factors 102 Hours

0.88934 [SYS 061400] .88934200 - System

Line Item SYS - Contingency And Escalation

BOE

Resources

es		Cost Element		Skill		Department	Curve	Ouantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	6.084.49	Dollars
	Factors	6084.49 Dollars							
	ESC	ESCALATION	0000	NONE	7DEPT	No Department	Linear	4 014 23	Dollars

4014.23 Dollars Factors

Activity ID: 1EFB0215

Description: East Sewage Trtmnt Cluster L/L Functions, FY02

1 Schedule Risk Cost Risk

, tourney	Description: Last Collage Hamilt Claste		,					CODI TUDIO	. Semedine 1			
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
001	Landlord functions (Interceptor Trench, PU&D, Teller	1.00	ea	HC	320	320	17,113	30,018	0	47,131	6,041	53,172
002	CLEANUP	1.00	each	HC	178	178	9,082	24,560	0	33,643	3,206	36,849
IBCCER0001a	Perform Landlord Support Functions	1.00	ea	HC	936	936	21,210	28,157	0	49,367	7,487	56,854
IBCEER0001b	H20SIZ Cluster Landlord	1.00	ls	EE	204	204	4,915	374	0	5,288	1,735	7,023
SSL1c	Sanitary Sewer Collection System	1.00	each	EE	970	970	20,661	0	0	20,661	7,293	27,954
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	27.110	27.110	0	27.110
	To	tal for Activi	tv 1FFB021	5·		2 608	72 980	83 110	27 110	183 200	25 762	208 962

Line Item 001 - Landlord functions (Interceptor Trench, PU&D, Teller

BOE

Historical Data Source:

The historical data is the FY98 Work Plan and similar actual costs through September 1998. The FY98 Work Plan was based on previous years experience for the same activities at Rocky Flats.

Based on the number of subcontract dollars and project management hours used to achieve the FY00 scope. Project costs include A5H costs to remove materials and decontaminate as necessary, costs for transporting materials to the PU&D yard or other designated disposal or storage area, project manager's hours for subcontractor oversight, and for performing PPRs and project and Budget reviews.

Historical Data Source -

Ttem Desc -

Breakdown of Historical Data:

Item - Landlord Support

Units - 1 lot

Unit Cost - NA

Unit Cost Adjustment factor - NA

Revised Unit Cost - NA

Basis for adjustment - NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Units Resources Skill Cost Element Department Curve

WBS No: 1EFB07 Baseline Devl Proiect **Rocky Flats Closure Project** Activity ID: 1EFB0215 WBS Filter 1EFB **Baseline Cost and Basis of Estimate** Activity Filter

			Daseille Cost at	iu basis		ctivity Filter	*	Starts In FY	*
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	R100S	RMRS Salaried		Linear	320.16	Hours
			•		•			•	

Hours Factors 360

0.88934 [SYS 061400] .88934200 - System 0000 NONE R100S RMRS Salaried 4.548.23 Dollars A5H SUBCONTRACTED SRVS

5000 Dollars 1.02283 -- FY00 Escalation --Factors

0.88934 [SYS 061400] .88934200 - System R100S RMRS Salaried 25.470.08 Dollars A5H SUBCONTRACTED SRVS 0000 NONE

Factors 28000 Dollars 1.02283 -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - System

Line Item 002 - CLEANUP

BOE

Historical Data Source:

The historical data is the FY98 Work Plan and similar actual costs through September 1998. The FY98 Work Plan was based on previous years experience for the same activities at Rocky Flats.

Based on the number of subcontract dollars and project management hours used to achieve the FY00 scope. Project costs include A5H costs to remove materials and decontaminate as necessary, costs for transporting materials to the PU&D yard or other designated disposal or storage area, project manager's hours for subcontractor oversight, and for performing PPRs and project and Budget reviews.

Historical Data Source -

Item Desc -

Breakdown of Historical Data:

Item - Landlord Support

Units - 1 lot

Unit Cost - NA

Unit Cost Adjustment factor - NA

Revised Unit Cost - NA

Basis for adjustment - NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es		Cost Element	Skill	Department	Curve	Quantity Units
	750	STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	R100S RMRS Salaried	Linear	17.79 Hours
	Factors	20 HOURS				

HOURS

_								0.88934 [SYS 06140	01 .88934200 - Svstem
	750	STRAIGH	IT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	R100S	RMRS Salaried	Linear	160.08 Hours
1	actors	180	HOURS						

						0.88934 ISYS 061400	01 .88934200 - S	svstem
A5H	SUBCONTRACTED SRVS	0000	NONE	R100S	RMRS Salaried	Linear	24.560.43	Dollars

27000 DOLLARS 1.02283 -- FY00 Escalation --Factors

0.88934 [SYS 061400] .88934200 - System

Line Item IBCCER0001a - Perform Landlord Support Functions BOE

Historical Data Source:

The historical data is the FY98 Work Plan and the actual costs through April 1998. The FY98 Work Plan was based on previous years experience for the same activities at Rocky Flats.

Item Desc:

THE LANDLORD FUNCTIONS ASSOCIATED WITH MAINTAINING THE RFETS OUTER BUFFER ZONE (SBZ) AND CONTINUING ROUTINE NPDES STORM WATER MONITORING OPERATIONS CONSISTS OF THE FOLLOWING ACTIVITIES IN FY98:

- 1. PROVIDE AND MAINTAIN ELECTRICAL POWER TO ESTABLISHED SAMPLING STATIONS,
- 2. MAINTAINING BUFFER ZONE FIRE BREAKS, AND
 3. MAINTAINING ROADS TO PROVIDE DAILY ACCESS TO ENVIRONMENTAL MONITORING OPERATIONS.,

Breakdown of Historical Data:

Item:

- 1. ER Project (R217S)
- Environmental Engineer (Inspection, verification and reporting 1 manager x60 hrs)
- 2. ER Project (R217S)
- PROJECT MANAGEMENT Coordination, IWCP, PODs 1 manager x75hrs)
- 3.Leased Labor Maintenance (213H)

Page 148 of 388 6/23/00 11:25:02 AM OFFICIAL USE ONLY WBS No: 1EFB07 **Rocky Flats Closure Project** 1EFB0215 Activity ID: **Baseline Cost and Basis of Estimate**

Baseline Devl Proiect 1EFB WBS Filter

Quantity Units

0.88934 [SYS 061400] .88934200 - System

Curva

Activity Filter Starts In FY * Electricians PROVIDE FOR ELECTRICITY, REPAIR AND MAINTENANCE OF POWER LINES TO ENVIRONMENTAL MONITORING STATIONS(2 electricians x 9 days x 9 hrs) + (\$0.08 $kwh \times 37,500 kwh)$. 4. Leased Labor Maintenance (213H) Heavy equipment operators SNOW PLOWING OF PRIMARY BUFFER ZONE ROADS DURING HEAVY SNOW FALLS, AND GRADING TO MAINTAIN ROAD SURFACES(2 operators x 27 hrs x 8 events)+(1 labor x 27 hrs x 8 events) + (2400 gal x \$1.00/gal). 5. Leased Labor Maintenance (213H) Mission Support Specialists CLEAR AND MAINTAIN FIRE BREAK ROADS 2 EVENTS PER YEAR(2 operators x 27 hrs x 2 events)+(1 labor x 27 hrs x 2 events)+(600 gal x \$1.00/gal). 6. Leased Labor Maintenance (213H) Landlord support activities A5C supplies \$ 6,000.00 dollars. Unit Cost Adjustment factor: 1) NA 2) NA 3) NA 4) NA 5) NA 6) NA

Basis for adjustment: 1) NA 2) NA 3) NA

Cost Flement

- 4) NA
- 5) NA
- 6) NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Skill

Resources

	Cost Etement		Skill		Depariment	Curve	Quantity Units
750	STRAIGHT TIME BASE	C020 ELECTRIC	CIANS	C211S	Electrical Maintenance	Linear	144.07 Hours
Factors	162 Hours						
						0.88934 [SYS 06140	001 .88934200 - Svstem
750	STRAIGHT TIME BASE	E050 ENVIRON	IMENTAL ENGINEERS	R100S	RMRS Salaried	Linear	53.36 Hours
Factors	60 Hours						
						0.88934 [SYS 06140	001 88934200 - System
750	STRAIGHT TIME BASE	L050 MISSION	SUP SPEC I (CBLFAB.DSP.	C211S	Electrical Maintenance	Linear	96.05 Hours
Factors	108 Hours						
						0.88934 [SYS 06140	001 .88934200 - Svstem
750	STRAIGHT TIME BASE	L070 MISSION	SUP SPEC III	C211S	Electrical Maintenance	Linear	576.29 Hours
Factors	648 Hours						
						0.88934 [SYS 06140	001 .88934200 - Svstem
750	STRAIGHT TIME BASE	M020 MANAGE	RS (GRADE 69 - 72)	R100S	RMRS Salaried	Linear	66.70 Hours
Factors	75 Hours						
						0.88934 [SYS 06140	001 .88934200 - Svstem
A5C	SUPPLIES	0000 NONE		C211S	Electrical Maintenance	Linear	5.416.09 Dollars
Factors	6000 Dollars	1.015	FY00 Escalation				
						0.88934 [SYS 06140	001 .88934200 - Svstem
A5H	SUBCONTRACTED SRVS	0000 NONE		R100S	RMRS Salaried	Linear	22.741.14 Dollars
Factors	25000 Dollars	1.02283	FY00 Escalation				

Danartmant

Line Item IBCEER0001b - H20SIZ Cluster Landlord

BOE

BOE NARRATIVE:

- 1. PROVIDE FOR ELECTRICITY, REPAIR AND MAINTENANCE OF POWER LINES TO ENVIRONMENTAL MONITORING STATIONS(2 electricians x 3 days x 9 hrs) + (\$0.08 kwh x 12,500
- 2. CLEAR AND MAINTAIN FIRE BREAK ROADS 2 EVENTS PER YEAR(2 operators x 9 hrs x 2 events)+(1 labor x 9 hrs x 2 events)+(200 gal x \$1.00/gal).
- 3. SNOW PLOWING OF PRIMARY BUFFER ZONE ROADS DURING HEAVY SNOW FALLS, AND GRADING TO MAINTAIN ROAD SURFACES(2 operators x 9 hrs x 8 events)+(1 labor x 9 hrs x 8 events) + (800 gal x \$1.00/gal).

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Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Activity Filter Baseline Devl 1EFB

Starts In FY *

4.	PROJECT	MANAGEMENT	AND	(Coordina	tion,IWCF	, PODs	s – 1	manager	x25hrs

5. Environmental Engineer (Inspection, verification and reporting - 1 manager x20 hrs)

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	Cost Element		Skill		Department	Curve	Quantity Un	nits
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	C211S	Electrical Maintenance	Linear	48.02 Hour	rs
Factors	54 Hours							
		1				0.88934 ISYS 06140	01 .88934200 - Svste	em
750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	R100S	RMRS Salaried	Linear	17.79 Hour	rs
Factors	20 Hours							
						0.88934 [SYS 06140	01 .88934200 - Svste	em
750	STRAIGHT TIME BASE	L050	MISSION SUP SPEC I (CBLFAB.DSP.	C211S	Electrical Maintenance	Linear	80.04 Hour	rs
Factors	90 Hours							
						0.88934 [SYS 06140	01 .88934200 - Svste	em
750	STRAIGHT TIME BASE	L070	MISSION SUP SPEC III	R100S	RMRS Salaried	Linear	35.57 Hour	rs
Factors	40 Hours							
						0.88934 [SYS 06140	01 .88934200 - Svste	em
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	R100S	RMRS Salaried	Linear	22.23 Hour	rs
Factors	25 Hours							
						0.88934 [SYS 06140	01 .88934200 - Svste	em
A5C	SUPPLIES	0000	NONE	R100S	RMRS Salaried	Linear	373.71 Dolla	ars

414 Line Item SSL1c - Sanitary Sewer Collection System

Factors

0.88934 [SYS 061400] .88934200 - System

BOE

Estimators Experience - Frank Huffman has approximately twenty two years experience in the operations of Sewage Treatment Plants. Plant experience equalls ten years. Local municipalities experience equalls ten plus years. Backup information is located in B995, contact Mr. Frank Huffman extension 6290.

Experience Item Desc - Sewage Treatment Plant Operations

Breakdown of Cost Data:

Item - Sewer Lines Inspection Water Treatment Facilities

Units - 1 Lot

Unit Cost - \$ 45K

Unit Cost Adjustment factor - NA

Cost Element

Dollars

Revised Unit Cost - NA

Basis for adjustment -NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

T070 MAINT, TECHS, (INSTRUMENT TEC R100S RMRS Salaried

1.015 -- FY00 Escalation --

Resources

750	STRAIGHT	T TIME BASE	R070	WASTE TREATMENT OPERATOR A	R100S	RMRS Salaried	Linear	590.08 Hours
Factors	663.5	Hours						
							0.88934 [SYS 06140	01 .88934200 - Svstem
750	STRAIGHT	TTIME BASE	T070	MAINT, TECHS, (INSTRUMENT TEC	R100S	RMRS Salaried	Linear	289.04 Hours
Factors	325	Hours						
							0.88934 [SYS 06140	01 .88934200 - System

Factors 102 Hours

750 STRAIGHT TIME BASE

0.88934 [SYS 061400] .88934200 - System

Line Item SYS - Contingency And Escalation

BOE

Resources

es	S Cost Element Skill			Department	Curve	Quantity	Units		
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	18,611.96	Dollars
	Factors	18612 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	8,498.20	Dollars
	Factors	8498.2 Dollars							

Linear

90.71 Hours

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Baseline Devl Proiect WBS Filter 1EFB

Activity Filter Starts In FY 1 Schodula Pisk

								neuvuy 1 mer Suurs m 1 1				
Activity ID: 1EI	FB0220 Description: East Sewage Trtmnt Clus	ster L/L Functi	ons, FY03	Cost Risk 1 Schedule Risk						Risk 1		
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
001	Landlord functions (Interceptor Trench.PU&D.Teller	1.00	ea	HC	320	320	17.113	30.018	0	47.131	5.921	53.052
002	CLEANUP	1.00	each	HC	178	178	9.082	24.560	0	33.643	3.142	36.785
IBCCER0001a	Perform Landlord Support Functions	1.00	1.00 ea		936	936	21.210	28.157	0	49.367	7.339	56.706
IBCEER0001b	H20SIZ Cluster Landlord	1.00	ls	EE	204	204	4.915	374	0	5.288	1.700	6.989
SSL1c	Sanitary Sewer Collection System	1.00	each	EE	970	970	20.661	0	0	20.661	7.149	27.809
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	50.150	50.150	0	50.150
		Total for Activ	ity 1EFB022	0:		2.608	72.980	83.110	50.150	206.240	25.251	231.491

Line Item 001 - Landlord functions (Interceptor Trench, PU&D, Teller

BOE

Historical Data Source:

The historical data is the FY98 Work Plan and similar actual costs through September 1998. The FY98 Work Plan was based on previous years experience for the same activities at Rocky Flats.

Item Desc:

Based on the number of subcontract dollars and project management hours used to achieve the FY00 scope. Project costs include A5H costs to remove materials and decontaminate as necessary, costs for transporting materials to the PU&D yard or other designated disposal or storage area, project manager's hours for subcontractor oversight, and for performing PPRs and project and Budget reviews.

Historical Data Source -Item Desc -Breakdown of Historical Data: Item - Landlord Support Units - 1 lot Unit Cost - NA Unit Cost Adjustment factor - NA Revised Unit Cost - NA Basis for adjustment - NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

s	Cost Element			Skill	Department	Curve	Quantity	Units
	750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	R100S RMRS Salaried	Linear	320.16	Hours

360 Hours Factors

_						0.88934 ISYS 061400	01.88934200 - Svstem
	A5H	SUBCONTRACTED SRVS	0000	NONE	R100S RMRS Salaried	Linear	4.548.23 Dollars

5000 1.02283 -- FY00 Escalation --**Factors** Dollars

						0.88934 [SYS 0614	4001 .88934200 - System
A5H	SUBCONTRACTED SRVS	0000	NONE	R100S	RMRS Salaried	Linear	25.470.08 Dollars

28000 Dollars 1.02283 -- FY00 Escalation --Factors

0.88934 [SYS 061400] .88934200 - System Line Item 002 - CLEANUP

BOE

Historical Data Source:

The historical data is the FY98 Work Plan and similar actual costs through September 1998. The FY98 Work Plan was based on previous years experience for the same activities at Rocky Flats.

Based on the number of subcontract dollars and project management hours used to achieve the FY00 scope. Project costs include A5H costs to remove materials and decontaminate as necessary, costs for transporting materials to the PU&D yard or other designated disposal or storage area, project manager's hours for subcontractor oversight, and for performing PPRs and project and Budget reviews.

Historical Data Source -Item Desc -Breakdown of Historical Data: Item - Landlord Support Units - 1 lot Unit Cost - NA Unit Cost Adjustment factor - NA

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WBS No: 1EFB07 1EFB0220 Activity ID:

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl

1EFB Activity Filter

Revised Unit Cost - NA Basis for adjustment - NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

s	Cost Element	Skill	Department	Curve	Quantity Units
	750 STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	R100S RMRS Salaried	Linear	17.79 Hours
	E				

Factors 20 HOURS

0.88934 [SYS 061400] .88934200 - System 160.08 Hours M020 MANAGERS (GRADE 69 - 72) R100S RMRS Salaried 750 STRAIGHT TIME BASE Linear

Factors 180 **HOURS**

0.88934 [SYS 061400] .88934200 - System R100S RMRS Salaried A5H SUBCONTRACTED SRVS 0000 NONE 24 560 43 Dollars Linear

Factors 27000 DOLLARS 1.02283 -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - System

Starts In FY

Line Item IBCCER0001a - Perform Landlord Support Functions

BOE

Historical Data Source:

The historical data is the FY98 Work Plan and the actual costs through April 1998. The FY98 Work Plan was based on previous years experience for the same activities at Rocky Flats.

Item Desc:

THE LANDLORD FUNCTIONS ASSOCIATED WITH MAINTAINING THE RFETS OUTER BUFFER ZONE (SBZ) AND CONTINUING ROUTINE NPDES STORM WATER MONITORING OPERATIONS CONSISTS OF THE FOLLOWING ACTIVITIES IN FY98:

- 1. PROVIDE AND MAINTAIN ELECTRICAL POWER TO ESTABLISHED SAMPLING STATIONS,
- 2. MAINTAINING BUFFER ZONE FIRE BREAKS, AND
- 3. MAINTAINING ROADS TO PROVIDE DAILY ACCESS TO ENVIRONMENTAL MONITORING OPERATIONS.

Breakdown of Historical Data:

Item:

1. ER Project (R217S)

Environmental Engineer (Inspection, verification and reporting - 1 manager x60 hrs)

2. ER Project (R217S)

PROJECT MANAGEMENT Coordination, IWCP, PODs - 1 manager x75hrs)

3.Leased Labor Maintenance (213H)

Electricians PROVIDE FOR ELECTRICITY, REPAIR AND MAINTENANCE OF POWER LINES TO ENVIRONMENTAL MONITORING STATIONS(2 electricians x 9 days x 9 hrs) + (\$0.08 $kwh \times 37.500 kwh)$.

4. Leased Labor Maintenance (213H)

Heavy equipment operators SNOW PLOWING OF PRIMARY BUFFER ZONE ROADS DURING HEAVY SNOW FALLS, AND GRADING TO MAINTAIN ROAD SURFACES (2 operators x 27 hrs x 8 events)+(1 labor x 27 hrs x 8 events) + (2400 gal x \$1.00/gal).

5. Leased Labor Maintenance (213H)

Mission Support Specialists CLEAR AND MAINTAIN FIRE BREAK ROADS 2 EVENTS PER YEAR(2 operators x 27 hrs x 2 events)+(1 labor x 27 hrs x 2 events)+(600 gal x \$1.00/gal).

6. Leased Labor Maintenance (213H)

Landlord support activities A5C supplies \$ 6,000.00 dollars.

Unit Cost Adjustment factor:

- 1) NA
- 2) NA 3) NA
- 4) NA
- 5) NA 6) NA

Basis for adjustment:

- 1) NA
- 2) NA 3) NA
- 4) NA
- 5) NA 6) NA

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Rocky Flats Closure Project

Proiect

Baseline Devl

o No: vity ID:	1EFB0220			Baseline Cost ar		or Estimate				7 7777	
	This estimat	e includes a project p	roductiv	ity/efficiency factor for comm	mitted b	ut as yet undefined o	Activity Filter	ns.	Start	s In FY	
Resources	:	Cost Element		Skill				Curve	Ouar	ntity	Units
	750 STRAIG	GHT TIME BASE	C020	ELECTRICIANS	C211S	Electrical Maintenance		Linear		144.07 H	Hours
	Factors 162	Hours									
				1				0.88934 [SYS (0614001.8893		
		SHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	R100S	RMRS Salaried		Linear		53.36 l	lours
	Factors 60	Hours						0.00024 [CVC)	0644001 0000	4200 0	· · otomo
	750 STRAIG	GHT TIME BASE	1.050	MISSION SUP SPEC I (CBLFAB.DSP.	C211S	Electrical Maintenance		0.88934 [SYS (0614001.8893	2 - 96.05 ا 96.05	
	Factors 108	Hours	LUJU	INIOSION GOL SI ECT (CDEI AD.DSI .	UZITO	Liectifical Maintenance		Lilleal		30.0311	iouis
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	750 STRAIG	GHT TIME BASE	L070	MISSION SUP SPEC III	C211S	Electrical Maintenance		Linear		576.29 H	
	Factors 648	Hours									
				1	I	1		0.88934 [SYS (0614001.8893		
		SHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	R100S	RMRS Salaried		Linear		66.70 l	Hours
	Factors 75	Hours						0.00004 [0)/0	004 4001 0000	4000 0	
	A5C SUPPL	IES	0000	NONE	C211S	Electrical Maintenance		0.88934 [SYS (4200 - S 416.09 [
	Factors 6000		1 0000	1.015 FY00 Escalation	CZIIS	Liectrical Maintenance		Lilleal	J.	410.0311	Juliais
	1 401015 0000	Bollaro		1.010				0.88934 [SYS (0614001.8893	4200 - S	vstem
	A5H SUBCO	NTRACTED SRVS	0000	NONE	R100S	RMRS Salaried		Linear		741.14	
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	BOE NARRATIV 1. PROVIDE F kwh). 2. CLEAR AND 3. SNOW PLOW x 8 events) 4. PROJECT M	SIZ Cluster Landlord E: OR ELECTRICITY, REPAIR MAINTAIN FIRE BREAK RIING OF PRIMARY BUFFER: + (800 gal x \$1.00/gal ANAGEMENT AND (Coordin.	OADS 2 E ZONE ROA). ation,IW		9 hrs x ND GRADI	2 events)+(1 labor x NG TO MAINTAIN ROAD S		cians x 3 days x	9 hrs) +	(\$0.08	kwh x 1
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Baseline Cost and Basis of Estimate

WBS Filter 1EFB
Activity Filter *

Proiect

Baseline Devl

Starts In FY

Line Item SSL1c - Sanitary Sewer Collection System

1EFB07

1EFB0220

BOE

WBS No:

Activity ID:

Estimators Experience - Frank Huffman has approximately twenty three years experience in the operations of Sewage Treatment Plants. Plant experience equalls ten years. Local municipalities experience equalls ten plus years. Backup information is located in B995, contact Mr. Frank Huffman extension 6290.

Experience Item Desc - Sewage Treatment Plant Operations

Breakdown of Cost Data:

Item - Sewer Lines Inspection Waste Treatment Facilities

Units - 1 Lot

Unit Cost - \$ 45K

Unit Cost Adjustment factor - NA

Revised Unit Cost - NA

Basis for adjustment -NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es		Cost Element	Skill		Department	Curve	Quantity	Units
	750	STRAIGHT TIME BASE	R070 WASTE TREATMENT OPERATOR A	R100S	RMRS Salaried	Linear	590.08	Hours

Factors 663.5 Hours

						0.00334 1313 00140	01.00334200 - 3VSIEIII
750	STRAIGHT TIME BASE	T070	MAINT, TECHS, (INSTRUMENT TEC	R100S	RMRS Salaried	Linear	90.71 Hours

Factors 102 Hours

						0.88934 1515 06140	UI .88934ZUU - SV	stem
750 STRAIG	SHT TIME BASE	T070	MAINT, TECHS, (INSTRUMENT TEC	R100S	RMRS Salaried	Linear	289.04 He	ours

Factors 325 Hours

0.88934 [SYS 061400] .88934200 - System

O 00004 [CVC 004400] 00004000 Cv

Line Item SYS - Contingency And Escalation

BOE

Resources

es		Cost Element		Skill		Department	Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	36.244.20	Dollars
	Factors	36244.2 Dollars							
	FSC	ESCALATION	0000	NONE	7DFPT	No Department	Linear	13 906 18	Dollars

Factors 13906.2 Dollars

WBS No: 1EFB0	8 Title: Elect. Substa. Cluster Land	dlord										
Activity ID: 1EFB0290 Description: Elect. Substa. Cluster Landlord Functions, FY00 Cost Risk 2 Schedule Risk 1												
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
1	Corrective maintenance	1.00	each	HC	29	29	626	167	0	793	305	1.098
3	Preventive maintenance	1.00	each	HC	5	5	107	19	0	126	52	178
Total for Activity 1EFB0290:							733	186	0	919	358	1.276

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

Approximately 5 corrective/routine maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98 Item Desc - Fiscal Year Corrective Maintenance Breakdown of Data:

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WBS No: 1EFB08 **Rocky Flats Closure Project** 1EFB0290 Activity ID: **Baseline Cost and Basis of Estimate** Proiect Baseline Devl WBS Filter 1EFB Activity Filter

Starts In FY *

Item - Corrective maintenance Units - Work Packages

Unit Cost - \$419.80 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99 Basis for adjustment - None.

The percentage of maintenance effort (labor Type) is as follows:

15.38%

Electrician 32.31% (includes Linemen)

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Total Straught Time Base	s		Cost Element	Skill	Department	Curve	Ouantity Units
1.38645 ISYS 061300 1.386448 - Target 1.38645 ISYS 061300	Į	750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	1.25 Hours
STRAIGHT TIME BASE		Factors	2.5 h	0.3612 May 2000 Earned V	/alue Factor		
Table Tabl	ī					1.38645 [SYS 06130	001 1.386448 - Target
1.38645 ISYS 0613001 1.386448 - Taroset	Į	750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	1.88 Hours
To STRAIGHTTIME BASE C010 CARPENTERS KE10H Indust/Site Srvs Steelworkers Linear 2.03Hours		Factors	3.75 h	0.3612 May 2000 Earned V	/alue Factor		
Total Straight Time Base Co20 ELECTRICIANS KE10H Indust/Site Srvs Steelworkers Linear 2.59 Hours	r					1.38645 [SYS 06130	001 1.386448 - Target
1.38645 ISYS 0613001 1.386448 - Taroset IInsar 1.25	Į	750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	2.03 Hours
Factors STRAIGHT TIME BASE C020 ELECTRICIANS KE10H Indust/Site Srvs Steelworkers Linear 2.59 Hours		Factors	4.06 h	0.3612 May 2000 Earned V	/alue Factor		
Total STRAIGHT TIME BASE C020 ELECTRICIANS KE10H Indust/Site Srvs Steelworkers Linear 3.02 Hours	ĺ		T-			1.38645 [SYS 06130	
1,38645 SYS 061300 1,386448 - Tarcet	ļ	750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	2.59 Hours
T50 STRAIGHT TIME BASE C020 ELECTRICIANS KE10H Indust/Site Srvs Steelworkers Linear 3.02 Hours		Factors	5.17 h	0.3612 May 2000 Earned V	/alue Factor		
Table Tabl	ĺ		T-			1.38645 [SYS 06130	
1,38645 ISYS 061300 1,386448 - Taroet	ļ	750	STRAIGHT TIME BASE	•	· · · · · · · · · · · · · · · · · · ·	Linear	3.02 Hours
T50 STRAIGHT TIME BASE C020 ELECTRICIANS KE10H Indust/Site Srvs Steelworkers Linear 2.71 Hours		Factors	6.03 h	0.3612 May 2000 Earned V	/alue Factor		
Table	ſ					1.38645 [SYS 06130	
1.38645 SYS 061300	ļ	750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	2.71 Hours
Table Tabl		Factors	5.41 h	0.3612 May 2000 Earned V	/alue Factor		
Tactors 1.25 h	ſ						
1.38645 ISYS 061300 1.386448 - Taroet	Į	750				Linear	0.63 Hours
T50 STRAIGHT TIME BASE C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers Linear 1.25 Hours		Factors	1.25 h	0.3612 May 2000 Earned V	/alue Factor		
Tactors 2.5 h	Ī			T			
1.38645 SYS 0613001 1.386448 - Target 1.38645 SYS 0613001 1.3864	Į	750				Linear	1.25 Hours
T50 STRAIGHT TIME BASE C040 MAINTENANCE MACHINIST (incl Exp. KE10H Indust/Site Srvs Steelworkers Linear 1.04 Hours		Factors	2.5 h	0.3612 May 2000 Earned V	/alue Factor		
Tactors 2.08 h 0.3612 May 2000 Earned Value Factor 1.38645 ISYS 0613001 1.386448 - Target	ſ			1			
1.38645 SYS 061300 1.386448 - Target	Į	750				Linear	1.04lHours
750 STRAIGHT TIME BASE C040 MAINTENANCE MACHINIST (incl Exp. KE10H Indust/Site Srvs Steelworkers Linear 0.21 Hours Factors 0.42 h 0.3612 May 2000 Earned Value Factor 1.38645 ISYS 0613001 1.386448 - Target 750 STRAIGHT TIME BASE C070 PAINTERS KE10H Indust/Site Srvs Steelworkers Linear 2.14 Hours Factors 4.27 h 0.3612 May 2000 Earned Value Factor 1.38645 ISYS 0613001 1.386448 - Target 750 STRAIGHT TIME BASE C070 PAINTERS KE10H Indust/Site Srvs Steelworkers Linear 1.25 Hours Factors 2.5 h 0.3612 May 2000 Earned Value Factor		Factors	2.08 h	0.3612 May 2000 Earned V	/alue Factor		
Factors 0.42 h 0.3612 May 2000 Earned Value Factor 1.38645 ISYS 0613001 1.386448 - Target 750 STRAIGHT TIME BASE C070 PAINTERS KE10H Indust/Site Srvs Steelworkers Linear 2.14 Hours Factors 4.27 h 0.3612 May 2000 Earned Value Factor 1.38645 ISYS 0613001 1.386448 - Target 750 STRAIGHT TIME BASE C070 PAINTERS KE10H Indust/Site Srvs Steelworkers Linear 1.25 Hours Factors 2.5 h 0.3612 May 2000 Earned Value Factor	ſ			T T			
1.38645 SYS 061300 1.386448 - Target	Į					Linear	0.21lHours
750 STRAIGHT TIME BASE C070 PAINTERS KE10H Indust/Site Srvs Steelworkers Linear 2.14 Hours Factors 4.27 h 0.3612 May 2000 Earned Value Factor 1.38645 ISYS 06130011.386448 - Target 750 STRAIGHT TIME BASE C070 PAINTERS KE10H Indust/Site Srvs Steelworkers Linear 1.25 Hours Factors 2.5 h 0.3612 May 2000 Earned Value Factor		Factors	0.42 h	0.3612 May 2000 Earned V	/alue Factor		
Factors 4.27 h 0.3612 May 2000 Earned Value Factor 1.38645 ISYS 0613001 1.386448 - Target 750 STRAIGHT TIME BASE C070 PAINTERS KE10H Indust/Site Srvs Steelworkers Linear 1.25 Hours Factors 2.5 h 0.3612 May 2000 Earned Value Factor	ſ			T T			
750 STRAIGHT TIME BASE C070 PAINTERS KE10H Indust/Site Srvs Steelworkers Linear 1.25 Hours Factors 2.5 h 0.3612 May 2000 Earned Value Factor	Į					Linear	2.14lHours
750 STRAIGHT TIME BASE C070 PAINTERS KE10H Indust/Site Srvs Steelworkers Linear 1.25 Hours Factors 2.5 h 0.3612 May 2000 Earned Value Factor		Factors	4.27 h	0.3612 May 2000 Earned V	/alue Factor		
Factors 2.5 h 0.3612 May 2000 Earned Value Factor	ſ			T T			
	Į					Linear	1.25 Hours
1.38645 [SYS 061300] 1.386448 - Target		Factors	2.5 h	0.3612 May 2000 Earned V	/alue Factor		
					· · · · · · · · · · · · · · · · · · ·	1.38645 [SYS 06130	001 1.386448 - Target

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Ba
WBS Filter 1E
Activity Filter *

Baseline Devl 1EFB

Baseline Cost and Basis of Estimate	WBS Filter 1EFB Activity Filter * Starts In FY *
C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Sr	rys Steelworkers Linear 4.31 Hours
0.3612 May 2000 Earned Value Factor	
	1.38645 [SYS 061300] 1.386448 - Target
	rvs Steelworkers Linear 0.83 Hours
0.3612 May 2000 Earned Value Factor	1.38645 [SYS 061300] 1.386448 - Target
C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Sr	
0.3612 May 2000 Earned Value Factor	
	1.38645 [SYS 061300] 1.386448 - Target
	rvs Steelworkers Linear 1.84 Hours
0.3612 May 2000 Earned Value Factor	1.38645 [SYS 061300] 1.386448 - Target
C010 CARPENTERS KE10H Indust/Site Sr	
0.3612 May 2000 Earned Value Factor	
	1.38645 ISYS 0613001 1.386448 - Target
	rvs Steelworkers Linear 0.10 Hours
0.3612 May 2000 Earned Value Factor	1.38645 [SYS 061300] 1.386448 - Target
C010 CARPENTERS KE10H Indust/Site Sr	
0.3612 May 2000 Earned Value Factor	VS ORGINOTICIS LITERITY C. TOIL TORIS
	1.38645 ISYS 0613001 1.386448 - Target
	rvs Steelworkers Linear 0.14 Hours
0.3612 May 2000 Earned Value Factor	
0000 ELECTRICIANO	1.38645 [SYS 061300] 1.386448 - Target
	rvs Steelworkers Linear 0.03 Hours
0.3012 Iviay 2000 Lamed Value I actor	1.38645 [SYS 061300] 1.386448 - Target
C020 ELECTRICIANS KE10H Indust/Site Sr	
0.3612 May 2000 Earned Value Factor	
	1.38645 [SYS 061300] 1.386448 - Target
	rys Steelworkers Linear 0.15 Hours
0.3612 May 2000 Earned Value Factor	4 0004F ICVC 00400014 000440 T4
CO40 MAINTENANCE MACHINIST (incl. Evp. KE10H Indust/Sito Sr	1.38645 [SYS 061300] 1.386448 - Target vs Steelworkers Linear 0.05 Hours
	VS Steelworkers Linear U.OSII louis
010012 11104 2000 201100 70100	1.38645 ISYS 0613001 1.386448 - Target
C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Sr	rys Steelworkers Linear 0.06 Hours
0.3612 May 2000 Earned Value Factor	
	1.38645 [SYS 061300] 1.386448 - Target
	rvs Steelworkers Linear 0.01 Hours
0.3612 May 2000 Earned Value Factor	1.38645 [SYS 061300] 1.386448 - Target
C070 PAINTERS KE10H Indust/Site Sr	
0.3612 May 2000 Earned Value Factor	
	1.38645 ISYS 0613001 1.386448 - Target
	rys Steelworkers Linear 0.11 Hours
0.3612 May 2000 Earned Value Factor	
C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Sr	1.38645 [SYS 061300] 1.386448 - Target vs Steelworkers Linear 0.04 Hours
C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Sr 0.3612 May 2000 Earned Value Factor	vs Steelworkers Linear 0.04iHours
	C080

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl 1EFB

1.38645 [SYS 061300] 1.386448 - Target

	Daseille Cost a	illu basis oi Estilliate	Activity Filter *	Starts In FY *
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	0.04 Hours
Factors 0.07 h	0.3612 May 2000 Earned Value Fa	actor		
			1.38645 [SYS 06130	001 1.386448 - Target
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	0.22 Hours
Factors 0.43 h	0.3612 May 2000 Earned Value Fa	actor		
			1.38645 [SYS 06130	001 1.386448 - Target
751 OVERTIME BASE & PRE.	C090 STRUCTURAL AND METAL WORKE	KE10H Indust/Site Srvs Steelworkers	Linear	0.09 Hours
Factors 0.18 h	0.3612 May 2000 Earned Value Fa	actor		
			1.38645 [SYS 06130	001 1.386448 - Target
A5C SUPPLIES	0000 NONE	C210S Facilities Momt & Maintenance	e Linear	166.96 Dollars
Factors 328.47 d	1.015 FY00 Escalation	0.3612 May 2000 Earned \	√alue Factor	

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 11 preventative maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$31.09 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99 Basis for adjustment - None.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50%

Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

s	Cost Element		Skill		Department	Curve	Ouantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.50	Hours
Factors	4.99 h		0.3612 May 2000 Earned Value Fac	ctor				
						1.38645 [SYS 061300	01 1.386448 - Ta	raet
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.88	Hours
Factors	3.75 h		0.3612 May 2000 Earned Value Fac	ctor				
,						1.38645 [SYS 061300	01 1.386448 - Ta	raet
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.29	Hours
Factors	0.57 h		0.3612 May 2000 Earned Value Fac	ctor				
,						1.38645 [SYS 061300	01 1.386448 - Ta	raet
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.13	Hours
Factors	0.25 h		0.3612 May 2000 Earned Value Fac	ctor				
			_			1.38645 [SYS 061300	0 <u>1 1.386448 - Ta</u>	raet

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl

WBS Filter 1EFB

		Daseille Cost ai	iu Dasis	or Estimate	Activity Filter	*	Starts In FY *
751 OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	3	Linear	0.10 Hours
Factors 0.19 h		0.3612 May 2000 Earned Value Fac	ctor				
						1.38645 [SYS 06130	01 1.386448 - Target
751 OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	3	Linear	0.02 Hours
Factors 0.03 h		0.3612 May 2000 Earned Value Fac	ctor				
						1.38645 [SYS 06130	01 1.386448 - Target
A5C SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenand	ce	Linear	18.55 Dollars
Factors 36.5 d		1 015 FY00 Escalation		0.3612 May 2000 Farned	Value Factor		

factors 36.5 d 1.015 -- FY00 Escalation -- 0.3612 May 2000 Earned Value Factor

Total for Activity 1EFB0295:

1.38645 [SYS 061300] 1.386448 - Target

2.370

Units

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Activity ID: 1EF	B0295 Description: Elect. Substa. Cluster Landle		Cost Risk 2 Schedule Risk 1									
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
1	Corrective maintenance	1.00	each	НС	52	52	1.110	297	0	1.407	530	1.936
3	Preventive maintenance	1.00	each	HC	9	9	191	33	0	224	91	315
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	119	119	0	119

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 5 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$419.80 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99 Basis for adjustment - None.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 30.77% (includes Linemen)

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

Stationary Operating Engineer 1.54%

Cost Element

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	2.22 Hours
Factors 2.5 h				
			0.88934 [SYS 061400	01 .88934200 - Svstem
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	3.34 Hours
actors 3.75 h				
			0.88934 [SYS 061400	01 .88934200 - System
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	3.61 Hours
Factors 4.06 h				
			0.88934 [SYS 061400	01 88934200 - System

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Ba
WBS Filter 1E
Activity Filter *

Baseline Devl 1EFB

1EFB0295	Baseline Cost	and Basis of Estimate	WBS Filter 1EFB Activity Filter *	Starts In FY *
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwork		Linear 4.81 Hours
Factors 5.41 h				
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwork		934 [SYS 061400] .88934200 - System Linear 5.36 Hours
Factors 6.03 h	1 CO20 ILLECTRICIANS	INE TO I III III III III III III III III II	515	Lineal 5.30ii louis
				934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwork	ers	Linear 4.60 Hours
Factors 5.17 h			0.889	934 [SYS 061400] .88934200 - Svstem
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Ex	KE10H Indust/Site Srvs Steelwork	ers	Linear 2.22 Hours
Factors 2.5 h			0.000	224 [CVC 064400] 00024200 Custom
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Ex	xp KE10H Indust/Site Srvs Steelwork		934 [SYS 061400] .88934200 - System Linear 0.37 Hours
Factors 0.42 h				
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Ex	VE4011 In diret/Oite On a Ote shared	0.889	934 [SYS 061400] .88934200 - System Linear 1.85 Hours
750 STRAIGHT TIME BASE Factors 2.08 h	1 C040 IMAINTENANCE MACHINIST (Inclex	B KETOH Indust/Site Sivs Steelwork	ers	Linear 1.85iHours
2.00			0.889	934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelwork	ers	Linear 3.80 Hours
Factors 4.27 h			0.880	934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelwork	ers	Linear 2.22 Hours
Factors 2.5 h				
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwork		934 [SYS 061400] .88934200 - System Linear 7.65 Hours
Factors 8.6 h	1 0000 II EUMBERO ARB FILERTI ERRO	TRE TOTA IMIGOS/ONE CIVS CLECIWOTH		Linear 7.00 Floats
				934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE Factors 1.66 h	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwork	ers	Linear 1.48 Hours
Factors 1.66 h			0.889	934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwork		Linear 1.20 Hours
Factors 1.35 h			0.000	224 [CVC 064400] 88024200 Cycles
750 STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL WORK	E KE10H Indust/Site Srvs Steelwork		934 [SYS 061400] .88934200 - System Linear 3.27 Hours
Factors 3.68 h				
TEO OTRAIGUT TIME DAGE	DOTO WASTE TREATMENT ORERATOR	A 1/51011 1 1 1/0': 0 0: 1 1		934 [SYS 061400] .88934200 - System Linear 1.11 Hours
750 STRAIGHT TIME BASE Factors 1.25 h	R070 WASTE TREATMENT OPERATOR A	A KE10H Indust/Site Srvs Steelwork	ers	Linear 1.11 Hours
1 40000				934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelwork	ers	Linear 0.17 Hours
Factors 0.19 h			0.880	934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelwork		Linear 0.18 Hours
Factors 0.2 h				
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelwork		934 [SYS 061400] .88934200 - System Linear 0.11 Hours
Factors 0.12 h	1 COTO IDANT LIVILING	TALTOTT IIIIQUSI/OILE SIVS SIEEIWOIKI	513	LINEAL U.I IIITUUIS
			0.889	934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwork	ers	Linear 0.23 Hours
Factors 0.26 h			0.889	934 [SYS 061400] .88934200 - System
			5.000	

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WBS No: Activity ID:

1EFB08 1EFB0295

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Austrian Tile Baseline Devl 1EFB

	Daseille Oo.	Activity Fil	ter *	Starts In FY *
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	0.27 Hours
Factors 0.3 h				
754 OVERTIME BAGE & BRE	Occor ELECTRICIANO	KE4011 I. I. I/0': 0. 0. I. I.		1001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	0.24 Hours
Factors 0.27 h			0.88934 ISYS 0614	1001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl	Exp KE10H Indust/Site Srvs Steelworkers	Linear	0.09 Hours
Factors 0.1 h				
				1001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl	Exp KE10H Indust/Site Srvs Steelworkers	Linear	0.11 Hours
Factors 0.12 h				
751 OVERTIME BASE & PRE.	CO40 MAINTENANCE MACHINIST (incl	Exp KE10H Indust/Site Srys Steelworkers	0.88934 ISYS 0614 Linear	1001 .88934200 - Svstem 0.02 Hours
factors 0.02 h	1 C040 IMAINTENANCE MACHINIST UIICI	EXD KE IUH IIIIdus/Site Sivs Steelworkers	Linear	U.UZITIOUIS
0.02			0.88934 ISYS 0614	1001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	0.19 Hours
Factors 0.21 h				
T				1001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	0.11 Hours
Factors 0.12 h			0.00004 [0)/0.004	1001 0000 1000 0
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 ISYS 0614 Linear	1001 .88934200 - Svstem 0.07 Hours
Factors 0.08 h	C000 FEOMBERS AND FIFEITITERS	NE 1011 IIIdust/Site Sivs Steelworkers	Lilleal	0.07 1 10015
0.00			0.88934 [SYS 0614	100] .88934200 - System
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	0.06 Hours
Factors 0.07 h				
				100] .88934200 - System
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	0.38 Hours
Factors 0.43 h			0.00004 10000	1001 0000 1000 0
751 OVERTIME BASE & PRE.	COOL STRUCTURAL AND METAL WOR	RKE KE10H Indust/Site Srvs Steelworkers	0.88934 ISYS 0614 Linear	100] .88934200 - System 0.16 Hours
Factors 0.18 h	1 C090 ISTRUCTURAL AND WETAL WOR	RE RETOR IIIIdus/Site Sivs Steelworkers	Lilleal	U. IOITIOUIS
<i>actors</i> 0.10 11			0.88934 [SYS 0614	1001 .88934200 - System
751 OVERTIME BASE & PRE.	R070 WASTE TREATMENT OPERATO	R A KE10H Indust/Site Srvs Steelworkers	Linear	0.05 Hours
Factors 0.06 h				
T				1001 .88934200 - Svstem
A5C SUPPLIES	0000 NONE	C210S Facilities Momt & Maintenance	Linear	296.50 Dollars
Factors 328.47 d	1.015 FY00 Escalation		0.00004 [0)/0.004	1001 0000 1000 0
			0.88934 ISYS 0614	1001 .88934200 - System

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

Approximately 11 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$31.09 average in this cluster

6/23/00 11:25:08 AM Page 160 of 388 OFFICIAL USE ONLY WBS No: 1EFB08 **Rocky Flats Closure Project** Activity ID: 1EFB0295 **Baseline Cost and Basis of Estimate** Proiect Baseline Devl WBS Filter 1EFB

Activity Filter

Starts In FY

0.88934 [SYS 061400] .88934200 - System

2 Schedule Risk

Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99 Basis for adjustment - None.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50% Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

s		Cost Element		Skill		Department	Curve	Quantity Units
	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.44 Hours
F	Factors	4.99 h						
							0.88934 [SYS 06140	01 .88934200 - Svstem
L	750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	3.34 Hours
F	Factors	3.75 h						
_							0.88934 [SYS 06140	01 .88934200 - Svstem
	750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.51 Hours
F	Factors	0.57 h						
							0.88934 [SYS 06140	01 .88934200 - Svstem
	751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.22 Hours
F	Factors .	0.25 h						
_							0.88934 [SYS 06140	01 .88934200 - Svstem
	751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.17 Hours
F	Factors .	0.19 h						
_							0.88934 [SYS 06140	01 .88934200 - Svstem
	751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.03 Hours
F	Factors	0.03 h						
							0.88934 [SYS 06140	01 .88934200 - Svstem
	A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	32.95 Dollars
F	Factors	36.5 d		1.015 FY00 Escalation				

Line Item SYS - Contingency And Escalation

BOE

Resources

es	Cost Element		Skill			Department	Curve	Ouantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	71.74	Dollars
	Factors	71.7426 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	47.33	Dollars

47.3321 Dollars Description: Elect. Substa. Cluster Landlord Functions, FY02

7.00.11.17 1.21 1.21 1	Bescription Liber Substant Station Landing	, a . a	.0102					Cost tion 2 Seneative tion .						
Line Item	Item Description (tity Units BOE Labor		Labor Hours Labor Cost M		Materials/ Sub	Contingency	Total Prime Burden Cost		Total Cost		
					Hours/Unit	Total	Total	Cost	& Escalation	Cost				
1	1.00	1.00 each		52	52	1.110	297	0	1.407	392	1.799			
3	Preventive maintenance	1.00 each		1.00 each HC	1.00 each		HC 9	9 19	191	191 33	0	224	.4 67	291
SYS	1.00 ea		EE	0	0	0	0	312	312	0	312			
	Tot):		60	1.301	329	312	1.942	459	2.401				

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

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Cost Risk

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filter

Baseline Devl 1EFB

Starts In FY *

Approximately 5 corrective/routine maintenance work actions are expected. Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98 Item Desc - Fiscal Year Corrective Maintenance Breakdown of Data: Item - Corrective maintenance Units - Work Packages Unit Cost - \$419.80 average for this cluster Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99 Basis for adjustment - None. The percentage of maintenance effort (labor Type) is as follows: Carpenter 15.38% Electrician 30.77% (includes Linemen) Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62% Stationary Operating Engineer 1.54% This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

3	Cost Element	Skill	Department	Curve	Quantity Units
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	2.22 Hours
Factors	2.5 h				
				0.88934 ISYS 06140	
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	3.34 Hours
Factors	3.75 h				
	T	T T	T	0.88934 [SYS 06140	
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	3.61 Hours
Factors	4.06 h				
	OTD 4 10 1 IT THE D 4 0 F	Loos Electronia	1/5/01/ 1 / /01/ 0 0/ 1	0.88934 [SYS 06140	
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	4.60 Hours
Factors	5.17 h			0.00004 100/0.00440	01 00004000 0
750	CTDAIGUT TIME DAGE	C020 ELECTRICIANS	KE4011 Industricity Construction	0.88934 [SYS 06140	
750	STRAIGHT TIME BASE	I CO20 IELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	5.36lHours
Factors	6.03 h			0.88934 [SYS 06140	01 00024200 Cycles
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	0.88934 1515 06140 Linear	4.81 Hours
Factors	5.41 h	I CUZU IELECTRICIANS	KETUH IIIIdusi/Sile Sivs Sleeiworkers	Linear	4.6 HHOUIS
raciors	5.41 11			0.88934 [SYS 06140	01 8803/200 - System
750	STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srys Steelworkers	Linear	2.22 Hours
Factors	2.5 h		THE TOTAL INTRODUCTION OF TO OCCUPANTION		
1 delors				0.88934 [SYS 06140	01 88934200 - System
750	STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear	0.37 Hours
Factors	0.42 h				
				0.88934 [SYS 06140	01 .88934200 - Svstem
750	STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear	1.85 Hours
Factors	2.08 h				
				0.88934 [SYS 06140	01 .88934200 - Svstem
750	STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	2.22 Hours
Factors	2.5 h				
	1			0.88934 [SYS 06140	01 .88934200 - Svstem
750	STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	3.80 Hours
Factors	4.27 h				
			·	0.88934 [SYS 06140	01 .88934200 - Svstem

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Ba
WBS Filter 1E
Activity Filter *

Baseline Devl 1EFB

1EFB0300	Baseline Cost ar	d Basis of Estimate	WBS Filter Activity Filter	1EFB *	Starts In FY *
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Sr		Linear	7.65 Hours
Factors 8.6 h					
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Sn	ve Stoolworkore	0.88934 ISYS 06140 Linear	001 .88934200 - Svstem 1.48 Hours
Factors 1.66 h	COOO IF LOWIDLING AND FIFE ITTENS	I KE IVIT IIIIQQSVSILE SI	vs Steetworkers	Lilleal	1.401110015
				0.88934 [SYS 06140	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Sn	vs Steelworkers	Linear	1.20 Hours
Factors 1.35 h				0.00004 [0)/0.0044/	201 00004000 0
750 STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL WORKE	KE10H Indust/Site Sr	vs Steelworkers	0.88934 15 Y S 06 140	001 .88934200 - Svstem 3.27 Hours
Factors 3.68 h	SOO IS INCOTOTIVE AND INC. TO STATE	THE TOTAL HINGGOV CITO OF	VO OLOGIWOTIOIO	Lilloui	
	1				001 .88934200 - Svstem
750 STRAIGHT TIME BASE	R070 WASTE TREATMENT OPERATOR A	KD10H 776 Complex	Steelworkers	Linear	1.11 Hours
Factors 1.25 h				0.88034 [SVS 06140	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Sr	vs Steelworkers	Linear	0.17 Hours
Factors 0.19 h					
					001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Sn	vs Steelworkers	Linear	0.18 Hours
Factors 0.2 h				0.88934 [SYS.06140	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Sr	vs Steelworkers	Linear	0.11 Hours
Factors 0.12 h					
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Sr	041		00] .88934200 - System
751 OVERTIME BASE & PRE. Factors 0.26 h	CUZU JELECTRICIANS	KETUH Indust/Site Sh	vs Steelworkers	Linear	0.23 Hours
1 40075 0.20 11				0.88934 [SYS 06140	00] .88934200 - System
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Sn	vs Steelworkers	Linear	0.27 Hours
Factors 0.3 h				0.00004 [0)/0.0044	201 2020 1020 2
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Sn	ve Steelworkers	0.88934 ISYS 06140 Linear	00] .88934200 - System 0.24 Hours
Factors 0.27 h	COZO ILLECTIVICIANO	TETOTT IIIIdusvoite or	vs oteetworkers	Lilleal	0.241110013
				0.88934 [SYS 06140	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Sn	vs Steelworkers	Linear	0.09 Hours
Factors 0.1 h				0.00034 [676.0614)	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Sr	vs Steelworkers	Linear	0.11 Hours
Factors 0.12 h					
					001 .88934200 - Svstem
751 OVERTIME BASE & PRE. Factors 0.02 h	C040 MAINTENANCE MACHINIST (incl Exp	KE10H IIndust/Site Sn	vs Steelworkers	Linear	0.02 Hours
raciors 0.02 fi				0.88934 [SYS.06140	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C070 PAINTERS	KD10H 776 Complex	Steelworkers	Linear	0.19 Hours
Factors 0.21 h					
754 OVEDTIME DAGE & DDE	OOTO DAINTEDO	VE4011 1 1/0': 0	0: 1 1		001 .88934200 - Svstem
751 OVERTIME BASE & PRE. Factors 0.12 h	C070 PAINTERS	KE10H Indust/Site Sr	vs Steelworkers	Linear	0.11 Hours
V.12 II				0.88934 [SYS 06140	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Sn	vs Steelworkers	Linear	0.07 Hours
Factors 0.08 h				0.00004 701/0.55	001 0000 1000 0
				0.88934 ISYS 06140	00] .88934200 - System

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Baseline Devl WBS Filter 1EFB

ilter 1EFB Filter * Starts In

		Baseline Cost at	iu basis oi Estillate	Activity Filter	*	Starts In FY *
751 OVERTIME BASE & PRE.	C080 PLUMBERS AN	D PIPEFITTERS	KE10H Indust/Site Sr	vs Steelworkers	Linear	0.06 Hours
Factors 0.07 h						
					0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080 PLUMBERS AN	D PIPEFITTERS	KE10H Indust/Site Sr	vs Steelworkers	Linear	0.38 Hours
Factors 0.43 h						
					0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C090 STRUCTURAL	AND METAL WORKE	KE10H Indust/Site Sr	vs Steelworkers	Linear	0.16 Hours
Factors 0.18 h						
					0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	R070 WASTE TREAT	MENT OPERATOR A	KE10H Indust/Site Sr	vs Steelworkers	Linear	0.05 Hours
Factors 0.06 h						
					0.88934 [SYS 06140	01 .88934200 - Svstem
A5C SUPPLIES	0000 NONE		C210S Facilities Mon	nt & Maintenance	Linear	296.50 Dollars
<i>Factors</i> 328.47 d	1.015 F)	'00 Escalation				
					0.88934 [SYS 06140	01 .88934200 - System

Line Item 3 - Preventive maintenance

BOE

reventive maintenance

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to

corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 11 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$31.09 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99 Basis for adjustment - None.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50% Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Cost Element	Skill	Department	Curve	Ouantity Units
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	4.44 Hours
Factors 4.99 h				
			0.88934 [SYS 0614	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear	3.34 Hours
Factors 3.75 h				
			0.88934 [SYS 0614	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	0.51 Hours
Factors 0.57 h				
			0.88934 [SYS 0614	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	0.22 Hours
Factors 0.25 h				
			0.88934 [SYS 0614	001 .88934200 - Svstem

WBS No: 1EFB08 Baseline Devl Proiect **Rocky Flats Closure Project** 1EFB0300 Activity ID: WBS Filter 1EFB **Baseline Cost and Basis of Estimate** Activity Filter 751 OVERTIME BASE & PRE C040 MAINTENANCE MACHINIST (incl Exp | KE10H | Indust/Site Srvs Steelworkers Linear Factors 0.19 0.88934 [SYS 061400] .88934200 - System 751 C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers OVERTIME BASE & PRE Linear

0.03 Hours 0.03 Factors h 0.88934 [SYS 061400] .88934200 - System A5C SUPPLIES 0000 NONE C210S Facilities Mgmt & Maintenance 32.95 Dollars Linear

36.5 1.015 -- FY00 Escalation --Factors

0.88934 [SYS 061400] .88934200 - System

Line Item SYS - Contingency And Escalation

BOE

Resources

es	Cost Element			Skill		Department	Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	213.87	Dollars
	Factors	213.866 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	97.65	Dollars

Factors 97.6508 Dollars

Activity ID: 1FFR0305 Description: Elect. Substa. Cluster Landlord Functions. FY03 Cost Risk 2 Schedule Risk

Starts In FY

0.17 Hours

Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
1	Corrective maintenance		each	HC	52	52	1.110	297	0	1.407	384	1.791
3	Preventive maintenance	1.00	each	HC	9	9	191	33	0	224	66	290
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	575	575	0	575
	Tot	60	1.301	329	575	2.206	450	2.656				

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 5 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$419.80 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99

Basis for adjustment - None.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 30.77% (includes Linemen)

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources Units Cost Element Skill Department Curve

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filter

Baseline Devl 1EFB

		Activity F	Cilter * Starts In FY *
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 3.34 Hours
Factors 3.75 h			
			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 2.22 Hours
Factors 2.5 h			
	T T		0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 3.61 Hours
Factors 4.06 h			0.00004 [60/0.004400] 0.0004000 0
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400] .88934200 - System Linear 4.60 Hours
Factors 5.17 h	1 CO20 IELECTRICIANS	RETURN IIII III III III III III III III III	Lineal 4.00inouis
Factors 3.17 II			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 4.81 Hours
Factors 5.41 h			
			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 5.36 Hours
Factors 6.03 h			
			0.88934 [SYS 061400] .88934200 - Svstem
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl	Exp KD10H 776 Complex Steelworkers	Linear 1.85 Hours
Factors 2.08 h			
750 OTDAIGUT TIME DAGE	OO40 MAINTENANOE MAQUINIOT ('	E 1/E4011 1 1/0': 0 0: 1 1	0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (Incl	Exp KE10H Indust/Site Srvs Steelworkers	Linear 2.22 Hours
Factors 2.5 h			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	CO40 MAINTENANCE MACHINIST (incl.	Exp KE10H Indust/Site Srvs Steelworkers	Linear 0.37 Hours
Factors 0.42 h	1 00+0 IMM THAT ELLY MADE IMPORTMENT (INIO	EXP RETOTI madal/one orva one morners	Linear 0.37 Flours
1 4010/15			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear 3.80 Hours
Factors 4.27 h			
			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear 2.22 Hours
Factors 2.5 h			
			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear 7.65 Hours
Factors 8.6 h			0.00004 [60/0.004400] 0.0004000 0
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	0.88934
Factors 1.66 h	1 COOO IFLOWIBLES AND FIFLITTIES	RETOTI IIIIdusVoite SIVS SteetWorkers	Lineal 1.40ii louis
raciors 1.00 II			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear 1.20 Hours
Factors 1.35 h			
			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL WOR	KE KE10H Indust/Site Srvs Steelworkers	Linear 3.27 Hours
Factors 3.68 h			
			0.88934 ISYS 0614001 .88934200 - Svstem
750 STRAIGHT TIME BASE	I R070 WASTE TREATMENT OPERATOR	R A KE10H Indust/Site Srvs Steelworkers	Linear 1.11 Hours
Factors 1.25 h			
754 01/507145 0405 4 055	OO40 OARRENTERO		0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 0.17 Hours
Factors 0.19 h			0.88934 [SYS 061400] .88934200 - System
			0.00304 013 0014001.00304200 - System

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filter

Baseline Devl 1EFB

IEFB0303	Baseline Cost a	nd Basis of Estimate	Activity Filter *	Starts In FY *
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers		0.18 Hours
Factors 0.2 h			0.90034 [SVS.064	4001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers		0.11 Hours
Factors 0.12 h				
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers		4001 .88934200 - Svstem 0.23 Hours
Factors 0.26 h	. 5525 1225 11157 115			
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061]	4001 .88934200 - Svsten 0.27 Hours
Factors 0.3 h	C020 IELECTRICIANS	RETUR IIIIdus//Site SIVs Steelworkers	s Linear	U.2/Inouis
				4001 .88934200 - Svster
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	s Linear	0.24 Hours
Factors 0.27 h			0.88934 ISYS 061	4001 .88934200 - Svsten
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworker		0.09 Hours
actors 0.1 h				
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp.	KE10H Indust/Site Srys Steelworker		4001 .88934200 - Svster 0.11 Hours
Cactors 0.12 h	TOTO INVINITEINANCE INVIOLINING TAILOREAD	TILE TOTAL INTIGGGV ONC STATE OF CONVOINCES	, <u>————————————————————————————————————</u>	O.TTII IOUIS
				4001 .88934200 - Svster
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	s Linear	0.02 Hours
0.02			0.88934 [SYS 061	400] .88934200 - Syster
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	s Linear	0.19 Hours
Factors 0.21 h			0.00024 16V6.064	4001 00024200 Custon
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers		400] .88934200 - Syster 0.11 Hours
Factors 0.12 h				
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers		400] .88934200 - Syster 0.06 Hours
Factors 0.07 h	1 C060 IPLOWBERS AND PIPEFITTERS	RETUR IIIIdus//Site SIVs Steelworkers	s Linear	U.UOIHOUIS
				4001 .88934200 - Svster
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	s Linear	0.07 Hours
actors 0.08 h			0.88934 ISYS.061	4001 .88934200 - Svster
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers		0.38 Hours
Factors 0.43 h				
751 OVERTIME BASE & PRE.	C090 STRUCTURAL AND METAL WORKE	KE10H Indust/Site Says Steelworker		4001 .88934200 - Svster 0.16 Hours
Tactors 0.18 h	COSO ISTROCTORAL AND WETAL WORKL	L TOTT IIII III III III III III III III I	S Lilleal	U. TOIL IOUIS
				4001 .88934200 - Svster
751 OVERTIME BASE & PRE.	R070 WASTE TREATMENT OPERATOR A	KE10H Indust/Site Srvs Steelworkers	s Linear	0.05 Hours
Factors 0.06 h			0.88934 ISVS.061	4001 .88934200 - Svster
A5C SUPPLIES	0000 NONE	C210S Facilities Mamt & Maintenand		296.50 Dollar
Factors 328.47 d	1.015 FY00 Escalation			
			0.88934 [SYS 061	4001 .88934200 - Systen

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl 1EFB

Activity Filter * Starts In FY

in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 11 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$31.09 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99 Basis for adjustment - None.

The percentage of maintenance effort (labor Type) required is as follows:

Descriptions Float Cubate Chater Landland Functions EVO4

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50% Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

s	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.44	Hours
Factor	s 4.99 h							
						0.88934 [SYS 06140	01 .88934200 - 3	Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	3.34	Hours
Factor	s 3.75 h							
						0.88934 [SYS 06140	01 .88934200 - 3	Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.51	Hours
Factor	s 0.57 h							
						0.88934 [SYS 06140	01 .88934200 - 3	Svstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.22	Hours
Factor	s 0.25 h							
						0.88934 [SYS 06140	01 .88934200 - 3	Svstem
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.17	Hours
Factor	s 0.19 h							
						0.88934 [SYS 06140	01 .88934200 - 3	Svstem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.03	Hours
Factor	rs 0.03 h							
						0.88934 [SYS 06140	01 .88934200 - 3	Svstem
A50	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	32.95	Dollars
Factor	rs 36.5 d		1.015 FY00 Escalation					

Line Item SYS - Contingency And Escalation

BOE

Resources

es		Cost Element		Skill		Department	Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	415.83	Dollars
	Factors	415.827 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	159.54	Dollars
	_								

Factors 159.544 Dollars

ACTIVITY ID. TEFE	Description. Elect. Substa. Cluster Landic	na Functio	115, F104					Cost Kisk	Schedule N	lisk I		
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
1	Corrective maintenance	1.00	each	HC	52	52	1,110	297	0	1.407	313	1.720
3	Preventive maintenance	1.00	each	HC	9	9	191	33	0	224	54	277

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Cont Dial

0.88934 [SYS 061400] .88934200 - System

Rockv Flats Closure Proiect

Baseline Cost and Basis of Estimate

Proiect

WBS Filter

1EFB

Activity Filter

*

			Daseiii	ie Cost and	u basis oi b	Sumate	A	ctivity Filter *		Sto	arts In FY *	
SYS	Contingency And Escalation	1	.00 ea	EE	0		0	0	285	285	0	285
·	·	Total for Ad	ctivity 1EFE	30310:		6	0 1.30	1 329	285	1.915	367	2.282

Line Item 1 - Corrective maintenance

1EFB08

1EFB0310

BOE

WBS No:

Activity ID:

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 5 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$419.80 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99 Basis for adjustment - None.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 30.77% (includes Linemen)

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Cost Element	Skill	Department	Curve	Ouantity Units
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	2.22 Hours
Factors 2.5 h				
			0.88934 [SYS 0614	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	3.34 Hours
Factors 3.75 h				
			0.88934 [SYS 0614	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	3.61 Hours
Factors 4.06 h				
			0.88934 [SYS 0614	001 .88934200 - System
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	4.60 Hours
Factors 5.17 h				
			0.88934 [SYS 0614	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	5.36 Hours
Factors 6.03 h				
			0.88934 ISYS 0614	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	4.81 Hours
Factors 5.41 h				
			0.88934 [SYS 0614	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST	(incl Exp KE10H Indust/Site Srvs Steelworkers	Linear	2.22 Hours
Factors 2.5 h				
			0.88934 [SYS 0614	001 .88934200 - System
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST	(incl Exp KE10H Indust/Site Srvs Steelworkers	Linear	1.85 Hours
Factors 2.08 h	• •		•	
			0.88934 [SYS 0614	001 .88934200 - Svstem

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filter

Baseline Devl r 1EFB

	Baseline Cost	and Basis of Estimate	Activity Filter *	Starts In FY *
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Ex	xp KE10H Indust/Site Srvs Steelworker	rs Linear	0.37 Hours
Factors 0.42 h				
				001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworker	rs Linear	2.22 Hours
Factors 2.5 h				
				001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworker	rs Linear	3.80 Hours
Factors 4.27 h				
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworker		001 .88934200 - Svstem 7.65 Hours
	I C080 IPLUMBERS AND PIPEFITTERS	RETUR lindust/Site Srvs Steelworker	rs Linear	ZIUOHICO.1
Factors 8.6 h			0.88934 [575.0614]	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworker		1.48 Hours
Factors 1.66 h	1 COCC II ECIMIDEIXO / XIND I II EI II I EIXO	TILLIOIT IIIIGGSVOICE OIVS OLECIWOTICE	Linear	1.401110013
1.00			0.88934 [SYS 0614	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworker		1.20 Hours
Factors 1.35 h				
			0.88934 [SYS 06140	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL WORKE	KE10H Indust/Site Srvs Steelworker	rs Linear	3.27 Hours
Factors 3.68 h				
			0.88934 ISYS 0614	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	R070 WASTE TREATMENT OPERATOR A	A KE10H Indust/Site Srvs Steelworker	rs Linear	1.11 Hours
Factors 1.25 h				
		1.5-1.1.		00] .88934200 - System
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworker	rs Linear	0.17 Hours
Factors 0.19 h			0.00004 [0.000.00444	001 00004000 0
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworker	rs Linear	00] .88934200 - System 0.18 Hours
Factors 0.2 h	COTO CARPENTERS	RETUR IIIIdust/Site Sivs Steetworker	is Lilleal	U.10 FIUUIS
raciois 0.2 II			0.88934 ISYS 06140	00] .88934200 - System
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworker		0.11 Hours
Factors 0.12 h	T GOTO TOTAL ELTITION			21111112412
			0.88934 [SYS 0614	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworker		0.23 Hours
Factors 0.26 h				
			0.88934 [SYS 0614	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworker	rs Linear	0.24 Hours
Factors 0.27 h				
			0.88934 [SYS 0614	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworker	rs Linear	0.27 Hours
Factors 0.3 h			0.00004 101/0.001	001 00004000 0 1
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Ex	r VE10H Indust/Site Strip Stanlander		001 .88934200 - Svstem 0.09 Hours
751 OVERTIME BASE & PRE. Factors 0.1 h	1 CU4U IIVIAINTENANCE WACHINIST (INCLEX	N VE IOU IIIIUUSI/SILE SIVS STEEIWOFKEI	rs Linear	บ.บฺวเทบนเร
raciois U.1 II			U 88034 CVC UC141	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Ex	n KE10H Indust/Site Srys Steelworker		0.11 Hours
Factors 0.12 h	, JOHO INMINITERATIVE INFORMATION MINIO MINIO I MINIO	NO THE TOTAL INIMAGNOTICE OF A OLGENWORKE	LIIIGAI	. V. I III IVUIS
VIII II			0.88934 [SYS 0614	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Ex	p KE10H Indust/Site Srvs Steelworker		0.02 Hours
Factors 0.02 h				
			0.88934 [SYS 0614	00] .88934200 - System

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Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter

1EFB

Baseline Devl

or Estimate	Activity Filter *	Starts In FY *
Indust/Site Srvs Steelworkers	s Linear	0.19 Hours
	0.88934 [SYS 0614	001 .88934200 - Svstem
Indust/Site Srvs Steelworkers	s Linear	0.11 Hours
	0.88934 [SYS 0614	001 .88934200 - Svstem
Indust/Site Srvs Steelworkers	s Linear	0.07 Hours
	0.88934 [SYS 0614	1001 .88934200 - System
Indust/Site Srvs Steelworkers	s Linear	0.06 Hours
	0.88934 [SYS 0614	1001 .88934200 - Svstem
Indust/Site Srvs Steelworkers		0.38 Hours
	0.88934 [SYS 0614	1001 .88934200 - Svstem
Indust/Site Srvs Steelworkers	s Linear	0.16 Hours
	0.88934 [SYS 0614	001 .88934200 - Svstem
Indust/Site Srvs Steelworkers		0.05 Hours
	0.88934 [SYS 0614	001 .88934200 - Svstem
Facilities Mgmt & Maintenand		296.50 Dollars
	Indust/Site Srvs Steelworkers	0.88934 ISYS 0614 Indust/Site Srvs Steelworkers

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 11 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$31.09 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99

Basis for adjustment - None.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50% Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es		Cost Element	Skill	Department	Curve	Quantity Units
	750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	4.44 Hours
	Factors	4.99 h				

0.88934 [SYS 061400] .88934200 - System

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl 1EFB

0.88934 [SYS 061400] .88934200 - System

	Daseille Co.	Activity Fil	ter *	Starts In FY *
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl	Exp KE10H Indust/Site Srvs Steelworkers	Linear	3.34 Hours
Factors 3.75 h				
			0.88934 [SYS 06140	01 .88934200 - Svstem
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	0.51 Hours
Factors 0.57 h				
			0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	0.22 Hours
Factors 0.25 h				
			0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl	Exp KE10H Indust/Site Srvs Steelworkers	Linear	0.17 Hours
Factors 0.19 h				
			0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	0.03 Hours
Factors 0.03 h				
			0.88934 [SYS 06140	01 .88934200 - Svstem
A5C SUPPLIES	0000 NONE	C210S Facilities Mgmt & Maintenance	Linear	32.95 Dollars
Factors 36.5 d	1.015 FY00 Escalation			

Line Item SYS - Contingency And Escalation

BOE

Resources

es		Cost Element		Skill		Department	Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	92.87	Dollars
	Factors	92.8685 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	191.77	Dollars
	Factors	191.768 Dollars							

WBS No: 1EFB0	9 Title: Misc. Buffer Zone Cluster I	andlord										
Activity ID: 1EFE	Description: Misc. Buffer Zone L/L Function	ons, FY00						Cost Risk	2 Schedule R	Pisk 1		
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
1	Corrective maintenance	1.00	each	HC	579	579	12.453	4.027	0	16.481	6.077	22.558
3	Preventive maintenance	1.00	each	HC	118	118	2.589	447	0	3.036	1.263	4.299
Tota			tv 1EFB0315	5:		697	15.042	4.475	0	19.517	7.340	26.857

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions expected in this cluster, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 166 corrective/routine maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$305.24 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are expected to be maintained at the same level as FY99

Revised number of work orders -None

Basis for adjustment - None

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter 1EFB Activity Filter

Baseline Devl

Starts In FY *

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38% Electrician 32.31% (includes Linemen)

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Cost Element	Skill	Department	Curve	Quantity Units
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	45.25 Hours
Factors 90.36 h	0.3612 May 2000 Earned	Value Factor		
			1.38645 [SYS 0613	3001 1.386448 - Target
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	49.02 Hours
Factors 97.89 h	0.3612 May 2000 Earned	Value Factor		
				3001 1.386448 - Target
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	30.17 Hours
Factors 60.24 h	0.3612 May 2000 Earned	Value Factor		
OTD 110117 THE DAGE	0010 01000000000			3001 1.386448 - Target
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	15.08 Hours
Factors 30.12 h	0.3612 May 2000 Earned	value Factor	4 00045 1000 004	2001 4 200440 Towns
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	1.38645 ISYS 0613	3001 1.386448 - Target 4.77 Hours
·	0.3612 May 2000 Earned		Linear	4.771HOUIS
Factors 9.52 h	0.3612 May 2000 Earned	value Factor	1 2064E ISVS 0611	3001 1.386448 - Target
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	62.42 Hours
Factors 124.65 h	0.3612 May 2000 Earned		Lilleal	02.42II louis
Paciors 124.00 II	0.3012 Way 2000 Lamed	value i actor	1 38645 [SVS 0611	3001 1.386448 - Target
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	
Factors 24.56 h	0.3612 May 2000 Earned			12.001110010
1 1100 11	0.0012 Way 2000 Earnou	Value I deter	1 38645 [SYS 0613	3001 1.386448 - Target
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST	(incl Exp KE10H Indust/Site Srvs Steelworkers	Linear	5.03 Hours
Factors 10.04 h	0.3612 May 2000 Earned			
			1.38645 [SYS 0613	3001 1.386448 - Target
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST	(incl Exp KE10H Indust/Site Srvs Steelworkers	Linear	25.14 Hours
Factors 50.2 h	0.3612 May 2000 Earned	Value Factor		
			1.38645 [SYS 0613	3001 1.386448 - Target
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST	(incl Exp KE10H Indust/Site Srvs Steelworkers	Linear	30.17 Hours
Factors 60.24 h	0.3612 May 2000 Earned	Value Factor		
				3001 1.386448 - Target
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	30.17 Hours
Factors 60.24 h	0.3612 May 2000 Earned	Value Factor		
				3001 1.386448 - Target
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	51.53 Hours
Factors 102.9 h	0.3612 May 2000 Earned	Value Factor		
	1			3001 1.386448 - Target
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTE	· ·	Linear	103.92 Hours
Factors 207.52 h	0.3612 May 2000 Earned	value Factor	4 00045 1000 004	2001 4 200440 T '
750 OTDAIGUT TIME DAGE	COOL DI LIMPEDO AND SISSEITTE	DC VEACH Indust/Cits Com Ctashus !		3001 1.386448 - Target
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTE		Linear	16.34 Hours
Factors 32.62 h	0.3612 May 2000 Earned	value racioi	4 20045 1000 0044	3001 1.386448 - Target
	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	1.30045 1515 0613	2001 1.360446 - Taruet

 WBS No:
 1EFB09

 Activity ID:
 1EFB0315

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl 1EFB

	Baseline Cost and Basis of Estimate	Activity Filter * Starts In FY *
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site S	Srvs Steelworkers Linear 20.11 Hour
Factors 40.16 h	0.3612 May 2000 Earned Value Factor	
		1.38645 [SYS 061300] 1.386448 - Target
750 STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL WORKE KE10H Indust/Site S	Srvs Steelworkers Linear 44.41 Hour
Factors 88.68 h	0.3612 May 2000 Earned Value Factor	4 000 4T 1/0 1/0 00 100 1 4 000 1 4 0
754 OVEDTIME DAGE & DDE	ONE CARRENTERS VETACLE IN 1975	1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE. Factors 3.01 h	C010 CARPENTERS KE10H Indust/Site S	Srvs Steelworkers Linear 1.51 Hour
Factors 3.01 h	0.3012 Iviay 2000 Earned Value Factor	1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C010 CARPENTERS KE10H Indust/Site S	
Factors 4.89 h	0.3612 May 2000 Earned Value Factor	
		1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C010 CARPENTERS KE10H Indust/Site S	Srvs Steelworkers Linear 2.26 Hour
Factors 4.52 h	0.3612 May 2000 Earned Value Factor	
		1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS KE10H Indust/Site S	Srvs Steelworkers Linear 3.12 Hour
Factors 6.23 h	0.3612 May 2000 Earned Value Factor	4 00045 100/0 0040003 1 000440 7
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS KE10H Indust/Site S	1.38645 [SYS 061300] 1.386448 - Target Srys Steelworkers Linear 0.76[Hour
	C020	Srvs Steelworkers Linear 0.76lHour
Factors 1.51 h	0.3612 Iway 2000 Earned Value Factor	1.38645 ISYS 0613001 1.386448 - Target
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS KE10H Indust/Site S	Srys Steelworkers Linear 3.27Hour
Factors 6.53 h	0.3612 May 2000 Earned Value Factor	5.10 0.00.00.00.00.00.00.00.00.00.00.00.00.
		1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS KE10H Indust/Site S	Srvs Steelworkers Linear 3.65 Hour
Factors 7.28 h	0.3612 May 2000 Earned Value Factor	
		1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site S	Srvs Steelworkers Linear 0.25 Hour
Factors 0.5 h	0.3612 May 2000 Earned Value Factor	4 000 4T 1/0 1/0 00 100 1 4 000 1 4 0
754 OVEDTIME DAGE 8 DDE	COAO MAINTENANCE MACHINICT (iz al Eura I/EAOLL Iz durat/Oita (1.38645 [SYS 061300] 1.386448 - Target Srys Steelworkers Linear 1.26 Hour
751 OVERTIME BASE & PRE. Factors 2.51 h	C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site S 0.3612 May 2000 Earned Value Factor	Srvs Steelworkers Linear 1.26lHour
ractors 2.51 II	0.3012 Iviay 2000 Earned Value Factor	1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site S	
Factors 3.01 h	0.3612 May 2000 Earned Value Factor	2170 OCCUTTOTION (CONTINUED)
		1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C070 PAINTERS KE10H Indust/Site S	
Factors 3.01 h	0.3612 May 2000 Earned Value Factor	
1		1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C070 PAINTERS KE10H Indust/Site S	Srvs Steelworkers Linear 2.57 Hour
Factors 5.14 h	0.3612 May 2000 Earned Value Factor	
754 OVEDTIME DAGE & DSS	OSSO DI UNDEDO AND DIDEFITTEDO (1/5/01/1/1/1/2)	1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site S	Srvs Steelworkers Linear 1.01 Hour
Factors 2.01 h	0.3612 May 2000 Earned Value Factor	1 2064E [CVC 064200] 4 206440 Torrot
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site S	1.38645 [SYS 061300] 1.386448 - Target Srys Steelworkers Linear 0.82 Hour
Factors 1.63 h	0.3612 May 2000 Earned Value Factor	2173 DICCHTURGIS LINGAI U.OZITIUUI
1.00	0.0012 May 2000 Earned Value I dolor	1.38645 ISYS 0613001 1.386448 - Target
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site S	
Factors 10.38 h	0.3612 May 2000 Earned Value Factor	
		1.38645 [SYS 061300] 1.386448 - Target

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Baseline Devl WBS Filter 1EFB

	Linear	2.22	Hours
ctivity Filter	*	Starts In FY	*
DD I mici	1212		

751	OVERTIM	E BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers
Factors	1 13	h		0.3612 May 2000 Farned Value Fa	ctor	

					1.38645 [SYS 06	313001 1.386448 - Target
A5C SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	4.027.28 Dollars

Factors 7923.09 d 1.015 -- FY00 Escalation -- 0.3612 May 2000 Earned Value Factor

1.38645 [SYS 061300] 1.386448 - Target

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance activities is:

maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions expected in the cluster, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 104 preventative maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Data Source - MMS and P&I Reporting System SVAR for FY98
Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$79.21 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are expected to be maintained at the same level as FY99

Revised number of work orders -None

Basis for adjustment - None

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50%

Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

			_	
Cost Element	Skill	Department	Curve	Ouantity Units
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	60.33 Hours
Factors 120.48 h	0.3612 May 2000 Earned \	Value Factor		
			1.38645 [SYS 061	3001 1.386448 - Target
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST ((incl Exp KE10H Indust/Site Srvs Steelworkers	Linear	45.25 Hours
Factors 90.36 h	0.3612 May 2000 Earned \	Value Factor		
			1.38645 [SYS 061	3001 1.386448 - Target
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTER	RS KE10H Indust/Site Srvs Steelworkers	Linear	6.91 Hours
Factors 13.79 h	0.3612 May 2000 Earned \	Value Factor		
			1.38645 [SYS 061	300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	3.01 Hours
Factors 6.02 h	0.3612 May 2000 Earned \	Value Factor		
			1.38645 [SYS 061	300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST ((incl Exp KE10H Indust/Site Srvs Steelworkers	Linear	2.26 Hours
Factors 4.52 h	0.3612 May 2000 Earned \	Value Factor		
			1.38645 [SYS 061	300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTER	RS KE10H Indust/Site Srvs Steelworkers	Linear	0.35 Hours
Factors 0.69 h	0.3612 May 2000 Earned \	Value Factor		
			1.38645 [SYS 061	3001 1.386448 - Target

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Baseline Devl Proiect WBS Filter

1EFB Activity Filter

Starts In FY

1.38645 [SYS 061300] 1.386448 - Target

A5C	SUPPLIES	0000 NONE		C210S	Facilities Mgmt & Maintenance	Linear	447.47 Dollars
Factors	880.34 d	1.015	FY00 Escalation		0.3612 May 2000 Earned Value Factor		

0.3612 May 2000 Earned Value Factor

Activity ID: 1EF	ctivity ID: 1EFB0320 Description: Misc. Buffer Zone L/L Functions. FY01 Cost Risk 2 Schedule Risk 1											
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
1	Corrective maintenance	1.00	each	HC	1.244	1.244	26.771	7.152	0	33.923	12.770	46.693
3	Preventive maintenance	1.00	each	HC	210	210	4.597	795	0	5.392	2.193	7.584
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	2.871	2.871	0	2.871
	1.454	31.368	7.947	2.871	42.186	14.963	57.149					

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions expected in this cluster, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 166 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$305.24 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are expected to be maintained at the same level as FY99

Revised number of work orders -None

Basis for adjustment - None

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 32.31% (includes Linemen)

Maint. Mech 13.85% Painter 10 77% Pipefitter 23.08%

Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

s	Cost Element		Skill	Department	Curve	Ouantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	53.57	Hours
Factors	60.24 h						
					0.88934 [SYS 061400	01 .88934200 - \$	Svstem
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	80.36	Hours
Factors	90.36 h						
					0.88934 [SYS 061400	01 .88934200 - \$	Svstem
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	26.79	Hours
Factors	30.12 h						
					0.88934 [SYS 061400	01 .88934200 - \$	Svstem
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	87.06	Hours
Factors	97.89 h						
			_		0.88934 [SYS 061400	01 .88934200 - \$	Svstem
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	110.86	Hours
Factors	124.65 h						
			<u> </u>		0.88934 [SYS 061400	01 .88934200 - \$	System

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Activity Filter

Baseline Devl 1EFB

1EFB0320	Baseline Co	ist and Basis of Estimate	VBS Filter TEFB Activity Filter *	Starts In FY *
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	116.08 Hours
Factors 130.52 h				
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 06 Linear	14001 .88934200 - Svstem 129.45 Hours
Factors 145.56 h	1 CO20 TELECTRICIANS	RETURN IIII dust/Site Sivs Steelworkers	Linear	129.45IFIOUIS
1 40.075			0.88934 [SYS 06	14001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (inc	Exp KE10H Indust/Site Srvs Steelworkers	Linear	8.93 Hours
Factors 10.04 h			0.88034 1575 0	14001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (inc	Exp KE10H Indust/Site Srvs Steelworkers	0.88934 1313 00 Linear	44.64 Hours
Factors 50.2 h				
TEO OTRAIGUE TIME DAGE	OO 40 MAINTENANCE MACHINIOT (15 K540H I 1 (/2); 0 0; 1 1		14001 .88934200 - Svstem
750 STRAIGHT TIME BASE Factors 60.24 h	1 C040 IMAINTENANCE MACHINIST (inc	Exp KE10H Indust/Site Srvs Steelworkers	Linear	53.57 Hours
1 401075 00.24 11			0.88934 ISYS 06	14001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	53.57 Hours
Factors 60.24 h			2.00024 10.00	4.4001 0000.4000 0
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 15Y5 06 Linear	14001 .88934200 - Svstem 91.51 Hours
Factors 102.9 h	1 0070 11 731131 2130	THE TOTAL MINISTER STATE OF THE	i Sail ISSAI	
		T.,		14001 .88934200 - Svstem
750 STRAIGHT TIME BASE Factors 207.52 h	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	184.56 Hours
Factors 207.52 h			0.88934 [SYS 06	1400] .88934200 - System
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	35.72 Hours
Factors 40.16 h				
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 ISYS 06 Linear	1400] .88934200 - System 29.01 Hours
Factors 32.62 h	T COOK IT ENVIRENCE AND THE ETHTERS	TKE TOTT IIIIdds/Joke SIVS Steelworkers	Lilleai	29.01 110013
				1400] .88934200 - System
750 STRAIGHT TIME BASE	C090 ISTRUCTURAL AND METAL WO	RKE KE10H Indust/Site Srvs Steelworkers	Linear	78.87 Hours
Factors 88.68 h			0.88934 ISYS.06	14001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	4.02 Hours
Factors 4.52 h				
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 06 Linear	14001 .88934200 - Svstem 4.35 Hours
Factors 4.89 h	1 COTO ICARPENTERS	RETURN IIII III III III III III III III III	Lilleal	4.33ITIOUIS
			0.88934 ISYS 06	14001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	2.68 Hours
Factors 3.01 h			0.88034 1575 0	14001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	0.88934 1313 00 Linear	6.47 Hours
Factors 7.28 h				
TEL OVERTIME DAGE & DDE	OCCO ELECTRICIANO	1/54011 IL 1 1/0': 0 0: 1 I		14001 .88934200 - Svstem
751 OVERTIME BASE & PRE. Factors 1.51 h	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	1.34 Hours
1.01			0.88934 [SYS 06	14001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	5.81 Hours
Factors 6.53 h			00.02/01 1,000.0	14001 00024200 Cuntor-
			<u> </u>	1400] .88934200 - System

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl 1EFB

			Baseline Cost ar	id Basis	of Estimate Activity Fil.	ter *	Starts In FY *
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.54 Hours
Factors	6.23 h						
			I		I		01 .88934200 - Svstem
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.44 Hours
Factors	0.5 h					0.88034 [676.06140	01 .88934200 - Svstem
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KF10H	Indust/Site Srys Steelworkers	U.00934 1313 00140	2.23 Hours
Factors	2.51 h	1 0010		- IXE 1011	THINGS ON OUT OF COMMON OF	L IIIOMI	Z.ZOII IOUIO
						0.88934 [SYS 06140	01 .88934200 - Svstem
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	2.68 Hours
Factors	3.01 h						
	0.4555445.54.05.4.555	0070	la.u.zzao	1/5 4 6 1 1			01 .88934200 - Svstem
751 Factors	OVERTIME BASE & PRE. 5.14 h	I C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.57 Hours
raciors	5.14 h					0.88934 [SYS.06140	01 .88934200 - Svstem
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.68 Hours
Factors	3.01 h						
						0.88934 [SYS 06140	01 .88934200 - Svstem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.79 Hours
Factors	2.01 h					0.00004 [0.00.00446	101 0000 1000 Ct
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KF10H	Indust/Site Srvs Steelworkers	U.86934 1515 06140 Linear	01 .88934200 - Svstem 9.23 Hours
Factors	10.38 h	1 0000	I LOWISE TO THE ET IT LETTE	I ILL TOTT	made, one of the decimentation	Eirioai	0.20110010
						0.88934 [SYS 06140	0] .88934200 - System
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.45 Hours
Factors	1.63 h						
754	OVERTIME DAGE & DDE	0000	OTDUOTUDAL AND METAL MODICE	1/54011	1 1 1/0% 0 00 1 1		0] .88934200 - System
751 Factors	OVERTIME BASE & PRE. 4.43 h	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	3.94 Hours
raciors	T. T. 11					0.88934 [SYS.06140	0] .88934200 - System
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	7.152.03 Dollars
Factors	7923.09 d		1.015 FY00 Escalation	·			
						0.88934 [SYS 06140	01 .88934200 - System

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions expected in the cluster, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 104 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$79.21 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are expected to be maintained at the same level as FY99

Revised number of work orders -None

Basis for adjustment - None

The percentage of maintenance effort (labor Type) required is as follows:

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Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Baseline Devl Proiect WBS Filter 1EFB Activity Filter

Starts In FY

794.67 Dollars

Linear

0.88934 [SYS 061400] .88934200 - System

Electrician 50.00% (includes Linemen) Maint. Mech 37.50%

Pipefitter 12.50%

1EFB09

1EFB0320

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

-- FY00 Escalation --

Resources

WBS No:

Activity ID:

S	Cost Element		Skill		Department	Curve	Ouantity Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	107.15 Hours
Factor	s 120.48 h						
						0.88934 [SYS 0614	001 .88934200 - Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	80.36 Hours
Factor	s 90.36 h						
						0.88934 [SYS 0614	001 .88934200 - Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	12.26 Hours
Factor	s 13.79 h						
						0.88934 [SYS 0614	001 .88934200 - Svstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.35 Hours
Factor	s 6.02 h						
_						0.88934 [SYS 0614	001 .88934200 - Svstem
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	4.02 Hours
Factor	s 4.52 h						
						0.88934 [SYS 0614	001 .88934200 - Svstem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.61 Hours
Factor	s 0.69 h						
						0.88934 ISYS 0614	001 88934200 - System

Line Item SYS - Contingency And Escalation

Factors

A5C SUPPLIES

880.34 d

BOE

Resource

ces		Cost Element Skill			Department	Curve	Quantity	Units	
	CON	CONTINGENCY	0000 NONE		ZDEPT	No Department	Linear	1,729,96	Dollars
_	Factors	1729.96 Dollars							
	ESC	ESCALATION	0000 NONE		ZDEPT	No Department	Linear	1.141.33	Dollars

C210S Facilities Mgmt & Maintenance

1141.34 Dollars

Activity ID: 1EF	B0325 Description: Misc. Buffer Zone L/L Function	ons, FY02						Cost Risk	2 Schedule F	Risk 1		
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
1 Corrective maintenance		1.00	1.00 each		1.244	1.244	26.771	7.152	0	33.923	9.450	43.374
3 Preventive maintenance		1.00	each	HC	210	210	4.597	795	0	5.392	1.623	7.014
SYS Contingency And Escalation		1.00 ea		EE	0	0	0	0	7.512	7.512	0	7.512
	Tot	al for Activi	ty 1EFB0325	5:		1.454	31.368	7.947	7.512	46.827	11.073	57.900

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions expected in this cluster, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 166 corrective/routine maintenance work actions are expected.

0000 NONE

1.015

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98 Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

WBS No: 1EFB09 1EFB0325 Activity ID:

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter 1EFB Activity Filter

Baseline Devl

Starts In FY *

Item - Corrective maintenance Units - Work Packages Unit Cost - \$305.24 average for this cluster Unit Adjustment factor - FY99 is used as a base year. FY00 on are expected to be maintained at the same level as FY99 Revised number of work orders -None Basis for adjustment - None The percentage of maintenance effort (labor Type) is as follows: Carpenter 15.38% Electrician 32.31% (includes Linemen) Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62% This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

s	Cost Element	Skill	Department	Curve	Ouantity Units
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	26.79 Hours
Factors	30.12 h				
				0.88934 [SYS 061400	
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	53.57 Hours
Factors	60.24 h				
	070 410417 7145 0405	L cous louppeutene	1/5 (0) 1 1 1 (0) 0 0 1 1 1	0.88934 [SYS 061400	
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	87.06 Hours
Factors	97.89 h			0.00024 [CVC.06440	01 00004000 Cyatam
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400 Linear	80.36 Hours
Factors		1 COTO ICANFENTENS	RETOTI IIIIddsVoite SIVS SteetWorkers	Lilleal	00.30II 10u15
ruciors	90.30			0.88934 [SYS 061400	01 88934200 - System
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	110.86 Hours
Factors					
				0.88934 [SYS 061400	01 .88934200 - Svstem
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	129.45 Hours
Factors	145.56 h				
				0.88934 [SYS 061400	
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	116.08 Hours
Factors	130.52 h				
		T		0.88934 [SYS 061400	
750	STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H IIndust/Site Srvs Steelworkers	Linear	53.57 Hours
Factors	60.24 h			0.00004 [0.000.004.40/	01 0000 4000 O
750	STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Cita Crua Staalwarkera	0.88934 [SYS 061400 Linear	44.64 Hours
Factors		1 C040 IMAINTENANCE MACHINIST HIG EXD	RETURN IIII III III III III III III III III	Lilledi	44.04INUUIS
1 actors	30.2			0.88934 [SYS 061400	01 88934200 - System
750	STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear	8.93 Hours
Factors					
				0.88934 [SYS 061400	0] .88934200 - System
750	STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	91.51 Hours
Factors	102.9 h				
			T	0.88934 [SYS 061400	
750	STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	53.57 Hours
Factors	60.24 h				
-			.	0.88934 [SYS 061400	01 .88934200 - Svstem

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Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filte

Baseline Devl 1EFB *

COOK DILLINGS ON AND DIRECTTEDS	Activity Fi	
C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear 184.56 Hours
		0.88934 [SYS 061400] .88934200 - System
C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear 29.01 Hours
COSO DI LIMPERS AND DIDEFITTERS	I/E4011 Indust/Cite Core Steelwarkers	0.88934 [SYS 061400] .88934200 - Svstem Linear 35.72 Hours
1 C080 IPLUMBERS AND PIPEFITTERS	RETUR TITIQUS//Site SIVS Steelworkers	Lineal 35.72inouis
		0.88934 [SYS 061400] .88934200 - System
C090 STRUCTURAL AND METAL WOR	KE KE10H Indust/Site Srvs Steelworkers	Linear 78.87 Hours
		0.88934 [SYS 061400] .88934200 - System
C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 4.02 Hours
0010 010000	1/5/01/ 1 1/01/ 0 0/ 1	0.88934 ISYS 0614001 .88934200 - System
I C010 ICARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 2.68 Hours
		0.88934 [SYS 061400] .88934200 - System
CO10 CARPENTERS	KE10H Indust/Site Srys Steelworkers	Linear 4.35 Hours
TOOTO TOTAL ENTITE IN	TETOT IIII MANONO OLI VO OLIO OLI VIII OLIO OLI VIII VII	EIIION 1.00II IONIO
		0.88934 [SYS 061400] .88934200 - System
C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 1.34 Hours
		0.88934 [SYS 061400] .88934200 - System
C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 5.54 Hours
		0.00004 [0.000.0001.00004000 0+
CO20 ELECTRICIANS	KE10H Indust/Site Style Steelworkers	0.88934 [SYS 061400] .88934200 - System Linear 5.81 Hours
COZO ELECTRICIANO	RETUIT III dust/Site Sivs Steelworkers	Linear 5.01 ji louis
		0.88934 [SYS 061400] .88934200 - System
C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 6.47 Hours
		0.88934 [SYS 061400] .88934200 - System
C040 MAINTENANCE MACHINIST (incl	Exp KE10H Indust/Site Srvs Steelworkers	Linear 2.68 Hours
		0.00004 100/0.004/000 0000/000 0
COAO MAINTENANCE MACHINIST (in al	Fun I/F4011 Indust/Cite Cm is Steelwarkers	0.88934 [SYS 061400] .88934200 - System Linear 0.44 Hours
1 C040 IMAINTENANCE MACHINIST (Incl.)	EXD KETUH Indust/Site Srvs Steelworkers	Linear 0.44iHours
		0.88934 [SYS 061400] .88934200 - System
C040 MAINTENANCE MACHINIST (incl	Exp. KE10H Indust/Site Srys Steelworkers	Linear 2.23 Hours
		0.88934 [SYS 061400] .88934200 - System
C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear 4.57 Hours
		0.88934 [SYS 061400] .88934200 - System
I C070 IPAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear 2.68 Hours
		0.00004 [0.00.0001 0.0001 0.000 0.00
		0.88934 [SYS 061400] .88934200 - System
CORO DI LIMBEDS AND DIDEETTERS	KE10H Indust/Site Save Steelworkers	
C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear 1.45 Hours
	C010 CARPENTERS C010 CARPENTERS C010 CARPENTERS C020 ELECTRICIANS C020 ELECTRICIANS C020 ELECTRICIANS C020 ELECTRICIANS C040 MAINTENANCE MACHINIST (incl	C090 STRUCTURAL AND METAL WORKE KE10H Indust/Site Srvs Steelworkers

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Rocky Flats Closure Project Rasalina Cost and Rasis of Estimate

Proiect WBS Filter Baseline Devl 1EFB

0.88934 [SYS 061400] .88934200 - System

		- Daseille Cost al	iu basis di Estillia	Activity Filt	er *	Starts In FY *
751 OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H Indust/Site	Srvs Steelworkers	Linear	9.23 Hours
Factors 10.38 h					0.88934 [SYS 06140	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H Indust/Site	Srvs Steelworkers	Linear	1.79 Hours
Factors 2.01 h					0.88934 [SYS 06140	001 .88934200 - Şvstem
751 OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H Indust/Site	Srvs Steelworkers	Linear	3.94 Hours
Factors 4.43 h					0.88934 [SYS 06140	001 .88934200 - Svstem
A5C SUPPLIES	0000	NONE	C210S Facilities M	amt & Maintenance	Linear	7.152.03 Dollars
Factors 7923.09 d		1.015 FY00 Escalation				

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned

maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions expected in the cluster, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 104 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$79.21 average in this cluster

Unit Adjustment factor - FY99 is used as a base year, FY00 on are expected to be maintained at the same level as FY99

Revised number of work orders -None

Basis for adjustment - None

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50% Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	Cost Element		Skill		Department	Curve	Ouantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	107.15	Hours
Factors	120.48 h							
		1				0.88934 [SYS 06140	001 .88934200 -	Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	80.36	Hours
Factors	90.36 h							
						0.88934 [SYS 06140	001 .88934200 -	Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	12.26	Hours
Factors	13.79 h							
						0.88934 [SYS 06140	001 .88934200 -	Svstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.35	Hours
Factors	6.02 h							
						0.88934 [SYS 06140	001 .88934200 -	Svstem
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	4.02	Hours
Factors	4.52 h							
	-					0.88934 [SYS 06140	001 .88934200 -	Svstem

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter

Baseline Devl 1EFB

			Daseille Cost at	iu basis	Activity Filter	*	Starts In FY *
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.61 Hours
Factors	0.69 h	•					

0000 NONE C210S Facilities Mgmt & Maintenance A5C SUPPLIES 794.67 Dollars

880.34 d 1.015 -- FY00 Escalation --Factors

0.88934 [SYS 061400] .88934200 - System

0.88934 [SYS 061400] .88934200 - System

Line Item SYS - Contingency And Escalation

BOE

Resources

es		Cost Element	Skill			Department	Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	5.157.04	Dollars
F	actors	5157.04 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	2.354.70	Dollars

Activity ID: 1EFB0330 Description: Misc. Buffer Zone L/L Functions, FY03 Cost Risk 2 Schedule Risk

Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
1	Corrective maintenance	1.00	each	HC	1.244	1.244	26.771	7.152	0	33.923	9.263	43.186
3	Preventive maintenance	1.00	each	HC	210	210	4.597	795	0	5.392	1.591	6.982
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	13.874	13.874	0	13.874
	Total for Activity 1EFB0330:							7.947	13.874	53.189	10.853	64.042

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions expected in this cluster, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 166 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$305.24 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are expected to be maintained at the same level as FY99

Revised number of work orders -None

Basis for adjustment - None

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15 38%

Electrician 32.31% (includes Linemen)

Maint. Mech 13.85% 10.77% Painter Pipefitter 23 08%

Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

s		Cost Element Skill			Department	Curve	Quantity	Units	
	750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	26.79	Hours

Factors 30.12 h

0.88934 [SYS 061400] .88934200 - System

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Ba
WBS Filter 1E
Activity Filter *

Baseline Devl 1EFB

C010 CARPENTERS C010 CARPENTERS C010 CARPENTERS C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers KE10H Indust/Site Srvs Steelworkers KE10H Indust/Site Srvs Steelworkers KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400] Linear 0.88934 [SYS 061400] Linear 0.88934 [SYS 061400] Linear 0.88934 [SYS 061400] Linear	87.06 Hours .88934200 - System 80.36 Hours
C010 CARPENTERS C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	0.88934 ISYS 0614001 Linear 0.88934 ISYS 0614001	87.06 Hours .88934200 - System 80.36 Hours
C010 CARPENTERS C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	0.88934 ISYS 0614001 Linear 0.88934 ISYS 0614001	87.06 Hours .88934200 - System 80.36 Hours
C010 CARPENTERS C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400] Linear 0.88934 [SYS 061400]	.88934200 - Svstem 80.36 Hours
C020 ELECTRICIANS		Linear 0.88934 ISYS 0614001	80.36 Hours
C020 ELECTRICIANS		0.88934 [SYS 061400]	
	KE10H Indust/Site Srvs Steelworkers		.88934200 - Svster
	KE10H Indust/Site Srvs Steelworkers		.88934200 - Syster.
	The for minds one of a decimancia	Lilloai	116.08 Hours
			110.001110410
		0.88934 [SYS 061400]	
C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	110.86 Hours
		0.90024 [5V5.064.400]	99034300 System
C020 FLECTRICIANS	KE10H Indust/Site Srys Steelworkers		129.45 Hours
	THE TOTAL MINISTRUMENT OF THE CONTROLLED		1201100110410
C040 MAINTENANCE MACHINIST (incl	Exp KE10H Indust/Site Srvs Steelworkers	Linear	8.93 Hours
		0.88834 [575.061400]	99034300 Syston
C040 MAINTENANCE MACHINIST (incl	Exp KE10H Indust/Site Srvs Steelworkers	U.88934 1313 0014001	53.57 Hours
C040 IMAINTENANCE MACHINIST (incl	Exp KE10H Indust/Site Srvs Steelworkers	Linear	44.64 Hours
		0.88934 [SYS.061400]	88934200 - Systen
C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	53.57 Hours
0070 01017500	1/5/01/ 1/1/01/ 0 0: 1		
I C070 IPAINTERS	KE10H IIndust/Site Srvs Steelworkers	Linear	91.51 Hours
		0.88934 [SYS 061400]	.88934200 - System
C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	29.01 Hours
COOR DILIMPEDO AND DIDEFITTEDO	KE4011 Indust/Oits On a Ots short in		.88934200 - Svsten 35.72 Hours
I C080 IPLUMBERS AND PIPEFITTERS	KETUH IIndust/Site Srvs Steelworkers	Linear	35.72IHOUIS
		0.88934 [SYS 061400]	.88934200 - Svsten
C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	184.56 Hours
COOL STRUCTURAL AND METAL WOR	NET VEAGLE Indust/Site Strip Steelwarkers		.88934200 - Systen 78.87 Hours
1 C090 ISTRUCTURAL AND METAL WOR	RE RETUR TITIOUSI/SITE SIVS STEETWOIKETS	Linear	/0.0/INOUIS
		0.88934 [SYS 061400]	.88934200 - Svster
C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	4.35 Hours
CO10 CARRENTERS	KE10H Indust/Site Save Steel werkers		88934200 - Svsten. 4.02 Hours
I CUIU ICARPENTERS	NETUT IIIdust/Site Sivs SteetWorkers	Linear	4.UZIFIOUIS
		0.88934 [SYS 061400]	.88934200 - System
	C040 MAINTENANCE MACHINIST (incl C040 MAINTENANCE MACHINIST (incl C070 PAINTERS C070 PAINTERS C080 PLUMBERS AND PIPEFITTERS C080 PLUMBERS AND PIPEFITTERS C080 PLUMBERS AND PIPEFITTERS C080 PLUMBERS AND PIPEFITTERS	C020 ELECTRICIANS KE10H Indust/Site Srvs Steelworkers C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers C070 PAINTERS KE10H Indust/Site Srvs Steelworkers C070 PAINTERS KE10H Indust/Site Srvs Steelworkers C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers C090 STRUCTURAL AND METAL WORKE KE10H Indust/Site Srvs Steelworkers C010 CARPENTERS	0.88934 ISYS 0614001

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Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl 1EFB

	Daseille Co	Activity Fi	lter * Starts In FY
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 2.68 Hou
Factors 3.01 h			0.0004 101/0.001 0055 1555 0
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400] .88934200 - Sysi Linear 5.81 Ho
Factors 6.53 h	I CUZU IELECTRICIANS	RETUR lindust/Site Srvs Steelworkers	Linear 5.811Hot
0.55			0.88934 [SYS 061400] .88934200 - Svsi
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 6.47 Hou
Factors 7.28 h			
			0.88934 [SYS 061400] .88934200 - Svs
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 1.34 Hou
Factors 1.51 h			0.88934 [SYS 061400] .88934200 - Svsi
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 5.54 Hot
Factors 6.23 h	1 John Hard Hard Hard	THE FORT INTRODUCTION OF THE CHARLES	
			0.88934 [SYS 061400] .88934200 - Svs
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (inc	cl Exp KE10H Indust/Site Srvs Steelworkers	Linear 2.23 Hou
Factors 2.51 h			
751 OVERTIME BASE & PRE.	COAO MAINTENANCE MACHINIST (in	cl Exp KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400] .88934200 - Sysi Linear 0.44 Hot
Factors 0.5 h	1 C040 IMAINTENANCE MACHINIST (III	CLEXD KETOH IIIIdus/Site Sivs Steelworkers	Lineal 0.441Hot
0.0			0.88934 [SYS 061400] .88934200 - Svsi
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (inc	cl Exp KE10H Indust/Site Srvs Steelworkers	Linear 2.68 Hou
Factors 3.01 h			
			0.88934 [SYS 061400] .88934200 - Syst
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear 4.57 Hou
Factors 5.14 h			0.88934 [SYS 061400] .88934200 - Syst
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear 2.68 Hot
Factors 3.01 h			
			0.88934 [SYS 061400] .88934200 - Syst
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear 1.79 Hou
Factors 2.01 h			0.00004 [0)/0.0044001 00004000 0
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	0.88934
Factors 1.63 h	1 COOO II EOWIDENS AND HI EITH LING	TIL TOTT IIII III III III III III III III I	Lineal 1.45ii lot
			0.88934 [SYS 061400] .88934200 - Svsi
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear 9.23 Hou
Factors 10.38 h			
754 0)/507145 0405 0 055	OCCO OTRUCTURAL AND VICTOR WIS	DDVE VE1011 1 1/0': 0 0: 1 :	0.88934 [SYS 061400] .88934200 - Svsi
751 OVERTIME BASE & PRE. Factors 4.43 h	I C090 ISTRUCTURAL AND METAL WC	DRKE KE10H Indust/Site Srvs Steelworkers	Linear 3.94 Hou
11 4.43			0.88934 [SYS 061400] .88934200 - Svsi
A5C SUPPLIES	0000 NONE	C210S Facilities Momt & Maintenance	Linear 7.152.03 Dol
Factors 7923.09 d	1.015 FY00 Escalation		
			0.88934 [SYS 061400] .88934200 - Syst

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions expected in the cluster, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filter

Department

Baseline Devl 1EFB

Starts In FY *

0.88934 [SYS 061400] .88934200 - System

Units

·Approximately 104 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$79.21 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are expected to be maintained at the same level as FY99

Revised number of work orders -None

Basis for adjustment - None

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Cost Element

Maint. Mech 37.50%

Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	107.15 Hours
Factors 120.48 h				
			0.88934 [SYS 06140	01 .88934200 - Svstem
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACH	IINIST (incl Exp KE10H Indust/Site Srvs Steelworkers	Linear	80.36 Hours
Factors 90.36 h				
			0.88934 [SYS 06140	01 .88934200 - Svstem
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPE	FITTERS KE10H Indust/Site Srvs Steelworkers	Linear	12.26 Hours
Factors 13.79 h				
			0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	5.35 Hours
Factors 6.02 h				
			0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACH	INIST (incl Exp KE10H Indust/Site Srvs Steelworkers	Linear	4.02 Hours
Factors 4.52 h				
			0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPE	FITTERS KE10H Indust/Site Srvs Steelworkers	Linear	0.61 Hours
Factors 0.69 h				
			0.88934 [SYS 06140	01 .88934200 - Svstem
A5C SUPPLIES	0000 NONE	C210S Facilities Momt & Maintenance	Linear	794.67 Dollars
<i>Factors</i> 880.34 d	1.015 FY00 Esc	alation		

Line Item SYS - Contingency And Escalation

BOE

Resources

es		Cost Element	Skill		Department		Curve	Ouantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	10.027.02	Dollars
	Factors	10027.0 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	3.847.17	Dollars

Factors 3847.17 Dollars

Activity ID: 1EFB0335 Description: Misc. Buffer Zone L/L Functions, FY04	
--	--

Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
1	Corrective maintenance	1.00	each	HC	1.244	1.244	26.771	7.152	0	33.923	7.549	41.473
3	Preventive maintenance	1.00	each	HC	210	210	4.597	795	0	5.392	1.296	6.688
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	6.864	6.864	0	6.864

2 Schedule Risk

Cost Risk

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

1.454

Proiect WBS Filter

1EFB

Baseline Devl

Activity Filter 31.368 8.846 55.024 6.864

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions expected in this cluster, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 166 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$305.24 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are expected to be maintained at the same level as FY99

Total for Activity 1EFB0335:

Revised number of work orders -None

Basis for adjustment - None

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 32.31% (includes Linemen)

Maint. Mech 13.85% 10.77% Painter Pipefitter 23.08% Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es		Cost Element		Skill		Department	Curve	Quantity	Units
L	750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	26.79	Hours
i	Factors	30.12 h					0.88934 [SYS 06140	01 .88934200 - 3	Svstem
	750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	80.36	Hours
Ī	Factors	90.36 h					0.88934 [SYS 06140	01 .88934200 - 3	Svstem
L	750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	53.57	Hours
j	Factors	60.24 h	ı	T		T	0.88934 [SYS 06140	01 .88934200 - 3	Svstem
L	750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	87.06	Hours
,	Factors	97.89 h	1				0.88934 [SYS 06140	01 .88934200 - 3	Svstem
L	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	116.08	Hours
i	Factors	130.52 h	ı	T		T	0.88934 [SYS 06140	01 .88934200 - 3	Svstem
L	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	110.86	Hours
1	Factors	124.65 h	1				0.88934 [SYS 06140	01 .88934200 - 3	Svstem
L	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	129.45	Hours
j	Factors	145.56 h	1				0.88934 ISYS 06140	01 .88934200 - 3	Svstem
L	750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	8.93	Hours
_	Factors	10.04 h					0.88934 [SYS 06140	001 .88934200 - 3	Svstem

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter

Baseline Devl 1EFB

	baseline Cost	and Basis of Estimate Activity Fi	lter * Starts In FY *
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl E		Linear 44.64 Hours
Factors 50.2 h			
			0.88934 ISYS 0614001.88934200 - System
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl E	xp KE10H Indust/Site Srvs Steelworkers	Linear 53.57lHours
Factors 60.24 h			0.00001 101/0.001 00001000 0
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	0.88934
Factors 102.9 h	1 CU/U IPAINTERS	RETURNINGUS/Site SIVS Steelworkers	Lineai 91.511Hours
raciois 102.9 II			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear 53.57 Hours
Factors 60.24 h			-
			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear 29.01 Hours
Factors 32.62 h			
			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear 35.72 Hours
Factors 40.16 h			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	U.00934 1313 0614001 .88934200 - System Linear 184.56lHours
Factors 207.52 h	1 COOO II EOMBERS AND I II EITH ERS	NETOTI IIIIddsVoite SIVS Steelworkers	Lineal 104.50ii louis
201.02			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL WORK	KE KE10H Indust/Site Srvs Steelworkers	Linear 78.87 Hours
Factors 88.68 h			
			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 4.02 Hours
Factors 4.52 h			
	COLO CARRENTERO	1/5/01/ 1 1/01/ 0 0: 1	0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE. Factors 4.89 h	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 4.35 Hours
Factors 4.89 h			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 2.68 Hours
Factors 3.01 h	TOOTO TOMIN ENTERIO	TIE TOTAL INTRODUCTION OF TO OCCUPANTION	
			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 5.81 Hours
Factors 6.53 h			
			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 6.47 Hours
Factors 7.28 h			
TEAL OVERTIME DAGE & DDE	OCCO EL FOTDIOLANO	VE1011 1 1 1/0': 0 0: 1 1	0.88934 [SYS 061400] .88934200 - System Linear 1.34 Hours
751 OVERTIME BASE & PRE. Factors 1.51 h	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 1.34 Hours
Factors 1.51 h			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 5.54 Hours
Factors 6.23 h	. Sand Hele VIII VIII VIII	. ILLIA IIII MANA ORO OTTO OROMINATORO	Elifedi J.OTII IOUIS
			0.88934 [SYS 061400] .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl E	XD KE10H Indust/Site Srvs Steelworkers	Linear 2.23 Hours
Factors 2.51 h			
			0.88934 [SYS 061400] .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl E	xp KE10H Indust/Site Srvs Steelworkers	Linear 0.44 Hours
Factors 0.5 h			0.00004 100/0.004 1003 0000 1000 7
			0.88934 [SYS 061400] .88934200 - System

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl 1EFB

0.88934 [SYS 061400] .88934200 - System

			Baseline Cost ar	nd Basis	of Estimate Activity Filte	er *	Starts In FY *
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	2.68 Hours
Factors	3.01 h						
		- 1	1		T	0.88934 [SYS 06140	01 .88934200 - Svstem
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.68 Hours
Factors	3.01 h						
				,		0.88934 [SYS 06140	01 .88934200 - Svstem
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.57 Hours
Factors	5.14 h						
						0.88934 [SYS 06140	01 .88934200 - System
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.79 Hours
Factors	2.01 h						
						0.88934 [SYS 06140	01 .88934200 - Svstem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.45 Hours
Factors	1.63 h						
						0.88934 [SYS 06140	01 .88934200 - Svstem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	9.23 Hours
Factors	10.38 h						
						0.88934 [SYS 06140	01 .88934200 - Svstem
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	3.94 Hours
Factors	4.43 h		·	·	·	·	·
						0.88934 [SYS 06140	01 .88934200 - Svstem
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	7,152.03 Dollars
Factors	7923.09 d		1.015 FY00 Escalation				

Line Item 3 - Preventive maintenance

BOE

Preventive maintenance

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to

corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions expected in the cluster, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 104 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$79.21 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY90 on are expected to be maintained at the same level as FY99

Revised number of work orders -None

Basis for adjustment - None

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50%

Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es		Cost Element	Skill		Department	Curve	Quantity	Units
	750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	107.15	Hours
	Factors	120.48 h						

0.88934 [SYS 061400] .88934200 - System

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl 1EFB

		Baseline Cost an	a Basis	Of Estimate Activity Filte	er *		Starts In FY *
750 STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	L	inear	80.36 Hours
Factors 90.36 h							
	1				0.88934	1 ISYS 06140	01 .88934200 - Svstem
750 STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	L	inear	12.26 Hours
Factors 13.79 h							
	1				0.88934	1 ISYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	L	inear	5.35 Hours
Factors 6.02 h							
	1				0.88934	1 ISYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	L	inear	4.02 Hours
Factors 4.52 h							
	1				0.88934	1 ISYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	L	inear	0.61 Hours
Factors 0.69 h							
	1				0.88934	1 ISYS 06140	01 .88934200 - Svstem
A5C SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	L	inear	794.67 Dollars
Factors 880.34 d		1.015 FY00 Escalation					

Line Item SYS - Contingency And Escalation

BOE

Resources

es	Cost Element Skill			Department	Curve	Quantity	Units		
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	2.239.39	Dollars
	Factors	2239.39 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	4.624.21	Dollars

Factors 4624.21 Dollars

(B0335 Description: Misc. Buffer Zone L/L Functions, FY05

Cost Risk 2 Schedule Risk

0.88934 [SYS 061400] .88934200 - System

Activity ID. 12	Description. Wilde, Durier Zone E/E i direct	0113, 1 1 00						Cost Risk	Z Schedule I	i i i		
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
1	Corrective maintenance	1.00	each	HC	1.244	1.238	26.654	7.121	0	33.775	9.276	43.051
3	Preventive maintenance	1.00	each	HC	210	209	4.577	791	0	5.368	1.593	6.961
SYS	Contingency And Escalation	1.00) ea	EE	0	0	0	0	26.686	26.686	0	26.686
Total for Activity 1EXXXB0335:						1.447	31.231	7.912	26.686	65.829	10.868	76.697

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions expected in this cluster, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 166 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$305.24 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are expected to be maintained at the same level as FY99

Revised number of work orders -None

Basis for adjustment - None

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

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 1EFB09
 Rockv Flats Closure Project
 Project

 1EXXXB0335
 Baseline Cost and Basis of Estimate
 WBS Filter

 Activity Filter

Electrician 32.31% (includes Linemen)
Maint. Mech 13.85%

Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

WBS No:

Activity ID:

	Cost Element	Skill	Department 145.1014 by 14015 and 140	Curve	Ouantity Units
	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	80.36 Hours
Factors	90.36 h			0.88934 [SVS 06	14001 .88934200 - Svstem
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	53.57 Hours
Factors	60.24 h				
	Т				14001 .88934200 - Svstem
	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	87.06 Hours
Factors	97.89 h			0.00034 1676 00	14001 .88934200 - Svstem
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	0.86934 1515 06 Linear	
Factors	30.12 h	1 OUTO TO/ANT ENTERNO	TAL TOTA IIII MASIVOITO OTVO OTCOMOTROIS	Lincai	20.7 311 10413
				0.88934 [SYS 06	14001 .88934200 - Svstem
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	129.45 Hours
Factors	145.56 h				
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	0.88934 ISYS 06 Linear	1400] .88934200 - System 116.08 Hours
750 Factors	130.52 h	CU20 ELECTRICIANS	KETUH Indust/Site Srvs Steelworkers	Linear	116.08 Hours
raciors	130.32 11			0.88934 [SYS 06	1400] .88934200 - System
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	
Factors	124.65 h				
	1				1400] .88934200 - System
750	STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers	Linear	8.93 Hours
Factors	10.04 h			0.00004 100/0.00	4 4001 0000 4000 C+
750	STRAIGHT TIME BASE	COAO MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers	0.88934 ISYS 06 Linear	14001 .88934200 - Svstem 44.64 Hours
Factors	50.2 h	COTO IMAINI ENANCE MACHINIST	IIIO EXD INC OI III III III III III III III III	Lineai	77.041110013
1 401015				0.88934 [SYS 06	14001 .88934200 - Svstem
750	STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers	Linear	53.57 Hours
Factors	60.24 h				
	T	T			14001 .88934200 - Svstem
750	STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	91.51 Hours
Factors	102.9 h			30 2V21 \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	14001 .88934200 - Svstem
750	STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	53.57 Hours
Factors	60.24 h				
	T			0.88934 [SYS 06	14001 .88934200 - Svstem
	STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTER	RS KE10H Indust/Site Srvs Steelworkers	Linear	29.01 Hours
Factors	32.62 h				
750	STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTER	RS KE10H Indust/Site Srvs Steelworkers		14001 .88934200 - Svstem 35.72 Hours
750 Factors	40.16 h	I COOU INLUMBERS AND PIPERITIES	VO VE I III	Linear	35./ZIHOUIS
1 401013	1 0.10 II			0.88934 [SYS 06	14001 .88934200 - Svstem
750	STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTER	RS KE10H Indust/Site Srvs Steelworkers	Linear	
Factors	207.52 h				
				0.88934 [SYS 06	1400] .88934200 - System

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Baseline Devl

Starts In FY *

1EFB

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filter

Baseline Devl r 1EFB

	Daseille Cost a	nd Basis of Estimate Activity Filte	r * Starts In FY *
750 STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL WORKE		Linear 78.87 Hours
Factors 88.68 h			
			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 4.02 Hours
Factors 4.52 h			
			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 4.35 Hours
Factors 4.89 h			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	U.88934 1515 0614001.88934200 - SVSterii Linear 2.68 Hours
Factors 3.01 h	T COTO ICANI LIVIENO	TRE TOTA IIII dust/Site SIVS SteetWorkers	Linear 2.0011 louis
140075 3.51			0.88934
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 5.81 Hours
Factors 6.53 h			
			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 6.47 Hours
Factors 7.28 h			
			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 1.34 Hours
Factors 1.51 h			
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400] .88934200 - System Linear 5.54 Hours
Factors 6.23 h	CO20 JELECTRICIANS	KE TOH IIIIdust/Site Sivs Steetworkers	Linear 5.54 Hours
raciois 0.25 II			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srys Steelworkers	Linear 2.23 Hours
Factors 2.51 h	TOOTO INITIATIVATE WITTO HISTORICE	TRETOTT INGUSTIONE OF STREETWORKERS	Elifodi 2.20 i loui3
2.6.			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear 0.44 Hours
Factors 0.5 h			
			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear 2.68 Hours
Factors 3.01 h			
			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear 4.57 Hours
Factors 5.14 h			0.00004 [0.00.004.400] 0.0004.000 0
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400] .88934200 - System Linear 2.68 Hours
Factors 3.01 h	1 CO70 IFAINTERS	RETURN IIII III III III III III III III III	Lilledi 2.001H001S
<i>Tuciors</i> 3.01 II			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear 1.79 Hours
Factors 2.01 h			
			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear 1.45 Hours
Factors 1.63 h			
			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear 9.23 Hours
Factors 10.38 h			
			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C090 STRUCTURAL AND METAL WORKE	KE10H Indust/Site Srvs Steelworkers	Linear 3.94lHours
Factors 4.43 h			0.00004 [0.00.0001.00004000.00
			0.88934 [SYS 061400] .88934200 - System

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter

Baseline Devl 1EFB

 Activity Filter
 *
 Starts In FY
 *

 e
 Linear
 7.152.03 Dollars

A5C SUPPLIES 0000 NONE

Factors 7923.09 d 1.015 -- FY00 Escalation --

Line Item 3 - Preventive maintenance

0.88934 [SYS 061400] .88934200 - System

ROF

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions expected in the cluster, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

C210S Facilities Momt & Maintenance

·Approximately 104 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98 Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$79.21 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are expected to be maintained at the same level as FY99

Revised number of work orders -None

Basis for adjustment - None

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50% Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity Units
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	107.15 Hours
actors 120.48 h				
			0.88934 [SYS 061	4001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (inc	Exp KE10H Indust/Site Srvs Steelworkers	Linear	80.36 Hours
actors 90.36 h				
			0.88934 [SYS 061	4001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	12.26 Hours
actors 13.79 h				
			0.88934 [SYS 061	4001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	5.35 Hours
actors 6.02 h				
			0.88934 [SYS 061	4001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (inc	E Exp KE10H Indust/Site Srvs Steelworkers	Linear	4.02 Hours
actors 4.52 h				
			0.88934 [SYS 061	4001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	0.61 Hours
actors 0.69 h				
			0.88934 [SYS 061	4001 .88934200 - Svstem
A5C SUPPLIES	0000 NONE	C210S Facilities Mgmt & Maintenance	Linear	794.67 Dollars
actors 880.34 d	1.015 FY00 Escalation			
			0.88934 [SYS 061	4001 .88934200 - System
Contingency And Escalation				

Line Item SYS - Contingency And Escalation

BOE

Resources	Cost Element	Skill	Department	Curve	Quantity	Units

WBS No: 1EFB09 Baseline Devl Proiect **Rocky Flats Closure Project** Activity ID: 1EXXXB0335 WBS Filter 1EFB **Baseline Cost and Basis of Estimate**

	Daseline Cost and Dasis of Estimate Activity Filter *							
CON	CONTINGENCY	0000	NONE	ZDEPT No Department	Linear	18.938.09 Dollars		
Factors	18938.1 Dollars							
ESC	ESCALATION	0000	NONE	ZDEPT No Department	Linear	7.747.58 Dollars		

7747.58 Dollars

WBS No: 1EFB1	10 <u>Title:</u> Security Bldgs Cluster Lan	dlord										
Activity ID: 1EF	B0390 Description: Security Bldgs Cluster Landle	llord Functions, FY00 Cost Risk 2 Schedule Risk 1										
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
1	Corrective maintenance	1.00	each	HC	722	722	15.533	4.847	0	20.380	7.580	27.960
1a	Corrective maintenance	0.74	each	HC	1.167	864	18.626	5.030	0	23.657	9.090	32.746
1b	Corrective maintenance	1.00	each	HC	547	547	17.601	266	0	17.868	8.590	26.457
1c	Corrective maintenance	0.98	each	HC	1.554	1.521	32.796	1.256	0	34.052	16.004	50.056
3	Preventive maintenance	1.00	each	HC	140	140	3.069	531	0	3.600	1.498	5.097
3a	Preventive maintenance	0.74	each	HC	197	146	3.192	552	0	3.744	1.558	5.302
3b	Preventive maintenance	1.00	each	HC	8	8	171	30	0	201	84	284
3c	Preventive maintenance	0.98	each	HC	262	256	5.619	140	0	5.759	2.742	8.501
	Tot	al for Activi	tv 1EFB039	0:		4.204	96.609	12.651	0	109.260	47.145	156.405

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

Approximately 116 corrective/routine maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$488.44 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 thru 05 are expectred to require the same level of effort as FY99

Revised number of work orders -None

Basis for adjustment -None

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 30.77% (includes Linemen)

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08%

Metal Worker 4.62% Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

,	Cost Element		Skill	Department	Curve	Ouantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	58.12	Hours

116.06 h 0.3612 May 2000 Earned Value Factor Factors

1.38645 [SYS 061300] 1.386448 - Target

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Baseline Devl WBS Filter Activity Filter

1EFB

1EFB0390	Baseline Cos	t and Basis of Estimate	tivity Filter *	Starts In FY *
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	53.65 Hours
Factors 107.13 h	0.3612 May 2000 Earned Value	Factor		
				3001 1.386448 - Target
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	35.77 Hours
Factors 71.42 h	0.3612 May 2000 Earned Value	e Factor	1 2064E ISVS 061	3001 1.386448 - Target
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	1.38643 1313 061 Linear	77.50 Hours
Factors 154.75 h	0.3612 May 2000 Earned Value		1 5111541	77.001110410
			1.38645 [SYS 061	3001 1.386448 - Target
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	86.43 Hours
<i>Factors</i> 172.58 h	0.3612 May 2000 Earned Value	Factor	1 39645 1975 061	3001 1.386448 - Target
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	
Factors 147.79 h	0.3612 May 2000 Earned Value			
			1.38645 [SYS 061	3001 1.386448 - Target
750 STRAIGHT TIME BASE		Exp KE10H Indust/Site Srvs Steelworkers	Linear	35.77 Hours
Factors 71.42 h	0.3612 May 2000 Earned Value	Factor		
750 STRAIGHT TIME BASE	COAO MANITENIANICE MACHINICT (in al	Exp KE10H Indust/Site Srvs Steelworkers	1.38645 ISYS 061 Linear	3001 1.386448 - Target 5.96 Hours
750 STRAIGHT TIME BASE Factors 11.9 h	0.3612 May 2000 Earned Value		Linear	5.96IHOUIS
raciors 11.9 II	0.3012 IMAY 2000 Earried Value	Factor	1.38645 [SYS.061	3001 1.386448 - Target
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl E	Exp KE10H Indust/Site Srvs Steelworkers	Linear	29.81 Hours
Factors 59.52 h	0.3612 May 2000 Earned Value	Factor		
	T			300] 1.386448 - Target
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	35.77 Hours
Factors 71.42 h	0.3612 May 2000 Earned Value	Factor	1 38645 ISVS 061	300] 1.386448 - Target
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	1.38043 [313 001] Linear	61.10 Hours
Factors 122 h	0.3612 May 2000 Earned Value		Linear	01.10[110013
	·		1.38645 [SYS 061	300] 1.386448 - Target
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	15.04 Hours
Factors 30.04 h	0.3612 May 2000 Earned Value	Factor		
750 OTDAIGUT TIME DAGE	OCCO. DI LIMPEDO AND DIDEFITTEDO	1/5/01/ 1 / //07/ 0 0/ 1 /		3001 1.386448 - Target
750 STRAIGHT TIME BASE Factors 38.68 h	C080 PLUMBERS AND PIPEFITTERS 0.3612 May 2000 Earned Value	KE10H Indust/Site Srvs Steelworkers	Linear	19.37 Hours
Tuciors 30.00 II	0.3012 IVIAY 2000 Lairied Value	: i actor	1.38645 [SYS.061	3001 1.386448 - Target
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	
Factors 47.61 h	0.3612 May 2000 Earned Value		·	
			1.38645 [SYS 061	3001 1.386448 - Target
750 STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL WOR	KE KE10H Indust/Site Srvs Steelworkers	Linear	52.66 Hours
Factors 105.15 h	0.3612 May 2000 Earned Value	Factor	4 000 45 10 40 004	0001 4 000440 T
750 STRAIGHT TIME BASE	POZO WASTE TREATMENT OPERATOR	R A KE10H Indust/Site Srvs Steelworkers	1.38645 ISYS 061 Linear	3001 1.386448 - Target 17.88 Hours
Factors 35.71 h	0.3612 May 2000 Earned Value		Lilleal	17.001110015
	5.5512 May 2500 Earned Value		1.38645 [SYS 061	3001 1.386448 - Target
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	2.68 Hours
Factors 5.36 h	0.3612 May 2000 Earned Value			
1				3001 1.386448 - Target
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	1.79 Hours
Factors 3.57 h	0.3612 May 2000 Earned Value	Factor	,	00014000445
			1.38645 [SYS 061	300] 1.386448 - Target

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Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Proiect Baseline Devl WBS Filter 1EFB Activity Filter *

TET B0390	Baseline Cost and Basis of Estimate	Activity Filter * Starts In FY *
751 OVERTIME BASE & PRE.	C010 CARPENTERS KE10H Indust/Site Srvs Steelworke	
Factors 5.8 h	0.3612 May 2000 Earned Value Factor	
		1.38645 ISYS 0613001 1.386448 - Target
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS KE10H Indust/Site Srvs Steelworke	ers Linear 3.70 Hours
Factors 7.39 h	0.3612 May 2000 Earned Value Factor	4 20045 ISVS 06420014 206440 Torrest
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS KE10H Indust/Site Srvs Steelworke	1.38645
Factors 7.74 h	0.3612 May 2000 Earned Value Factor	73 Lineal 3.00ii louis
		1.38645 ISYS 0613001 1.386448 - Target
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS KE10H Indust/Site Srvs Steelworke	ers Linear 4.32 Hours
Factors 8.63 h	0.3612 May 2000 Earned Value Factor	
		1.38645 ISYS 0613001 1.386448 - Target
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworke	ers Linear 0.30 Hours
Factors 0.6 h	0.3612 May 2000 Earned Value Factor	1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworke	
Factors 2.98 h	0.3612 May 2000 Earned Value Factor	215 Lilledi 1.45ii louis
2.50	0.5012 Ividy 2000 Ediffed Value 1 dolor	1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworke	
Factors 3.57 h	0.3612 May 2000 Earned Value Factor	
		1.38645
751 OVERTIME BASE & PRE.	C070 PAINTERS KE10H Indust/Site Srvs Steelworke	ers Linear 1.79 Hours
Factors 3.57 h	0.3612 May 2000 Earned Value Factor	
751 OVERTIME BASE & PRE.	C070 PAINTERS KE10H Indust/Site Srvs Steelworke	1.38645 [SYS 061300] 1.386448 - Target ers Linear 3.05 Hours
751 OVERTIME BASE & PRE. Factors 6.1 h	0.3612 May 2000 Earned Value Factor	ers Linear 3.05 Hours
vaciors 6.1 II	0.3012 Iviay 2000 Lamed Value Lactor	1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworke	
Factors 12.3 h	0.3612 May 2000 Earned Value Factor	
	·	1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworke	ers Linear 0.97 Hours
Factors 1.93 h	0.3612 May 2000 Earned Value Factor	
		1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworke	ers Linear 1.19 Hours
Factors 2.38 h	0.3612 May 2000 Earned Value Factor	1.38645 ISYS 0613001 1.386448 - Target
751 OVERTIME BASE & PRE.	C090 STRUCTURAL AND METAL WORKE KE10H Indust/Site Srys Steelworke	
Factors 5.26 h	0.3612 May 2000 Earned Value Factor	73 Lilleal 2.00li louis
0.20	0.0012 May 2000 Ediffed Valdo I deloi	1.38645 ISYS 0613001 1.386448 - Target
751 OVERTIME BASE & PRE.	R070 WASTE TREATMENT OPERATOR A KE10H Indust/Site Srvs Steelworke	
Factors 1.79 h	0.3612 May 2000 Earned Value Factor	
		1.38645 ISYS 0613001 1.386448 - Target
A5C SUPPLIES	0000 NONE C210S Facilities Momt & Maintena	
Factors 1.015 FY00 Escalation	9535 d 0.3612 May 2000 Earned	
		1.38645 [SYS 061300] 1.386448 - Target

Line Item 1a - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

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1EFB10 1EFB0390

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Proiect Baseline Devl WBS Filter 1EFB Activity Filter *

Starts In FY *

·Approximately 123 corrective/routine maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$686.56 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 74% of the FY 99

Department

budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficency return.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 32.31% (includes Linemen)

Cost Element

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

WBS No:

Activity ID:

750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	50.27 Hours
Factors	100.39 h		0.3612 May 2000 Earned Value Fac	tor			
			1		T	1.38645 [SYS 06130	01 1.386448 - Target
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	75.41 Hours
Factors	150.59 h		0.3612 May 2000 Earned Value Fac	tor			
	T	ı	1		T-	1.38645 [SYS 06130	
750	STRAIGHT TIME BASE	C010	CARPENTERS		Indust/Site Srvs Steelworkers	Linear	81.70 Hours
Factors	163.14 h		0.3612 May 2000 Earned Value Fac	tor			
		ı	1			1.38645 [SYS 06130	
	STRAIGHT TIME BASE	C020	ELECTRICIANS		Indust/Site Srvs Steelworkers	Linear	104.03 Hours
Factors	207.74 h		0.3612 May 2000 Earned Value Fac	tor			
	I	I			T	1.38645 [SYS 06130	
	STRAIGHT TIME BASE	C020			Indust/Site Srvs Steelworkers	Linear	108.93 Hours
Factors	217.51 h		0.3612 May 2000 Earned Value Fac	tor			
	OTD 4 (Q) IT TIME DAGE	0000	EL EGERIQUANG	1/5 / 01 1	1. 1. 1/01: 0. 0: 1. 1	1.38645 [SYS 06130	
	STRAIGHT TIME BASE	C020	IELECTRICIANS		Indust/Site Srvs Steelworkers	Linear	25.14 Hours
Factors	50.2 h		0.3612 May 2000 Earned Value Fac	tor		4 00045 1000 00400	01.4.000.440 T
750	STRAIGHT TIME BASE	0000	ELECTRICIANS	KE4011	Indust/Site Srvs Steelworkers	1.38645 [SYS 06130 Linear	121.48 Hours
Factors	242.58 h	C020	0.3612 May 2000 Earned Value Fac		indusi/site sivs steetworkers	Linear	121.48inouis
raciors	242.30 11		0.3012 Iviay 2000 Lamed value i ac	loi		1.38645 [SYS 06130	01 1 386448 - Target
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KF10H	Indust/Site Srys Steelworkers	Linear	50.27 Hours
Factors	100.39 h	0010	0.3612 May 2000 Earned Value Fac		III MAGO CITO CITO CITO CITO CITO CITO CITO CIT	Ellivai	00.E7 10010
1 401075			0.00 12 may 2000 2amou value i ac			1.38645 [SYS 06130	01 1.386448 - Target
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	8.38 Hours
Factors	16.73 h		0.3612 May 2000 Earned Value Fac	tor	•	•	-
						1.38645 [SYS 06130	01 1.386448 - Target
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	41.90 Hours
Factors	83.66 h		0.3612 May 2000 Earned Value Fac	tor			
						1.38645 [SYS 06130	01 1.386448 - Target

Curve

Units

Ouantity

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Baseline Devl WBS Filter 1EFB Activity Filter *

Starts In FY * 750 STRAIGHT TIME BASE KE10H Indust/Site Srvs Steelworkers 50.27 Hours C070 PAINTERS Linear Factors 100.39 h 0.3612 May 2000 Earned Value Factor 1.38645 [SYS 061300] 1.386448 - Target Linear 85,88 Hours 750 STRAIGHT TIME BASE C070 PAINTERS KE10H Indust/Site Srvs Steelworkers Factors 171.49 h 0.3612 May 2000 Earned Value Factor 1.38645 [SYS 061300] 1.386448 - Target Linear 27.22 Hours KE10H Indust/Site Srvs Steelworkers 750 STRAIGHT TIME BASE C080 PLUMBERS AND PIPEFITTERS Factors 54.36 h 0.3612 May 2000 Earned Value Factor 1.38645 [SYS 061300] 1.386448 - Target 750 STRAIGHT TIME BASE KE10H Indust/Site Srvs Steelworkers C080 PLUMBERS AND PIPEFITTERS Linear 173.19 Hours Factors 345.84 h 0.3612 May 2000 Earned Value Factor 1.38645 [SYS 061300] 1.386448 - Target 750 STRAIGHT TIME BASE C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers Linear 33.52 Hours 0.3612 May 2000 Earned Value Factor Factors 66.93 h 1.38645 [SYS 061300] 1.386448 - Target Linear 750 STRAIGHT TIME BASE C090 STRUCTURAL AND METAL WORKE | KE10H | Indust/Site Srvs Steelworkers 74.01 Hours Factors 147.79 h 0.3612 May 2000 Earned Value Factor 1.38645 [SYS 061300] 1.386448 - Target 751 OVERTIME BASE & PRE. C010 CARPENTERS KE10H Indust/Site Srvs Steelworkers 2.51 Hours Linear Factors 5.02 h 0.3612 May 2000 Earned Value Factor 1.38645 [SYS 061300] 1.386448 - Target 751 OVERTIME BASE & PRE C010 CARPENTERS KE10H Indust/Site Srvs Steelworkers Linear 3.77 Hours Factors 7.53 h 0.3612 May 2000 Earned Value Factor 1.38645 [SYS 061300] 1.386448 - Target 751 OVERTIME BASE & PRE C010 CARPENTERS KE10H Indust/Site Srvs Steelworkers Linear 0.3612 May 2000 Earned Value Factor Factors 8.16 h 1.38645 [SYS 061300] 1.386448 - Target 751 OVERTIME BASE & PRE. C020 ELECTRICIANS KE10H Indust/Site Srvs Steelworkers Linear 6.07 Hours 0.3612 May 2000 Earned Value Factor Factors 12 13 h 1.38645 [SYS 061300] 1.386448 - Target 751 OVERTIME BASE & PRE C020 ELECTRICIANS KE10H Indust/Site Srvs Steelworkers 1.68 Hours Linear Factors 3.35 h 0.3612 May 2000 Farned Value Factor 1.38645 [SYS 061300] 1.386448 - Target KE10H Indust/Site Srvs Steelworkers Linear 5,20 Hours 751 OVERTIME BASE & PRE C020 ELECTRICIANS Factors 10.39 h 0.3612 May 2000 Earned Value Factor 1.38645 [SYS 061300] 1.386448 - Target 751 OVERTIME BASE & PRE. C020 FLECTRICIANS KE10H Indust/Site Srvs Steelworkers Linear Factors 10.88 h 0.3612 May 2000 Earned Value Factor 1.38645 [SYS 061300] 1.386448 - Target 751 OVERTIME BASE & PRE C040 MAINTENANCE MACHINIST (incl Exp | KE10H | Indust/Site Srys Steelworkers Linear 0 42 Hours Factors 0.84 h 0.3612 May 2000 Earned Value Factor 1.38645 [SYS 061300] 1.386448 - Target 751 OVERTIME BASE & PRE. C040 MAINTENANCE MACHINIST (incl Exp | KE10H | Indust/Site Srys Steelworkers Linear 2.51 Hours Factors 5.02 h 0.3612 May 2000 Earned Value Factor 1.38645 [SYS 061300] 1.386448 - Target 751 OVERTIME BASE & PRE C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers 2 09 Hours Linear Factors 4 18 h 0.3612 May 2000 Farned Value Factor 1.38645 [SYS 061300] 1.386448 - Target 751 OVERTIME BASE & PRE KE10H Indust/Site Srys Steelworkers Linear 2 51 Hours Factors 5.02 h 0.3612 May 2000 Earned Value Factor 1.38645 [SYS 061300] 1.386448 - Target

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Rocky Flats Closure Project **Baseline Cost and Basis of Estimate**

Baseline Devl Proiect 1EFB WBS Filter

Activity Filter Starts In FY 751 OVERTIME BASE & PRE. C070 PAINTERS KE10H Indust/Site Srvs Steelworkers 4.29 Hours Linear Factors 8.57 0.3612 May 2000 Earned Value Factor 1.38645 [SYS 061300] 1.386448 - Target 751 OVERTIME BASE & PRE C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers 1.36 Hours Linear 2.72 h 0.3612 May 2000 Earned Value Factor Factors 1.38645 [SYS 061300] 1.386448 - Target 751 OVERTIME BASE & PRE. C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers 8.66 Hours Linear Factors 17.29 h 0.3612 May 2000 Earned Value Factor 1.38645 [SYS 061300] 1.386448 - Target OVERTIME BASE & PRE C090 STRUCTURAL AND METAL WORKE | KE10H | Indust/Site Srvs Steelworkers Linear 3.70 Hours 0.3612 May 2000 Earned Value Factor Factors 7.39 h 1.38645 [SYS 061300] 1.386448 - Target R070 WASTE TREATMENT OPERATOR A KE10H Indust/Site Srvs Steelworkers 751 OVERTIME BASE & PRE Linear 1.26 Hours Factors 2.51 0.3612 May 2000 Earned Value Factor 1.38645 [SYS 061300] 1.386448 - Target C210S Facilities Mamt & Maintenance 6.797.73 Dollars A5C SUPPLIES 0000 NONE Linear Factors 13204.4 d 1.028 -- FY00 Escalation --0.3612 May 2000 Earned Value Factor

Line Item 1b - Corrective maintenance

1.38645 [SYS 061300] 1.386448 - Target

1.38645 [SYS 061300] 1.386448 - Target

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

Approximately 16 corrective/routine maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$209.25 average for this cluster

Adjustment factor - FY99 is used as a base year. FY00 thru 05 are equal to FY99 scope

Revised number of work orders - No Change

Basis for adjustment - Directed targets.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 30.77% (includes Linemen)

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08%

Metal Worker 4.62%

Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es	Cost Element	Skill	Department	Curve	Ouantity Units	
	750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	1.99 Hours	
	Factors 3.98 h	0.3612 May 2000 Earned	d Value Factor			

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Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Activity Filte

Baseline Devl 1EFB

	Baseline Cost and Basis of Estimate Activity F.	ilter * Starts In FY *
750 STRAIGHT TIME BASE	C010 CARPENTERS KE10H Indust/Site Srvs Steelworkers	Linear 2.99 Hours
Factors 5.97 h	0.3612 May 2000 Earned Value Factor	
		1.38645 [SYS 061300] 1.386448 - Target
750 STRAIGHT TIME BASE	C010 CARPENTERS KE10H Indust/Site Srvs Steelworkers	Linear 3.24 Hours
<i>Cactors</i> 6.47 h	0.3612 May 2000 Earned Value Factor	
		1.38645 [SYS 061300] 1.386448 - Target
750 STRAIGHT TIME BASE	C020 ELECTRICIANS KE10H Indust/Site Srvs Steelworkers	Linear 4.82 Hours
Factors 9.62 h	0.3612 May 2000 Earned Value Factor	
===		1.38645 [SYS 061300] 1.386448 - Target
750 STRAIGHT TIME BASE	C020 ELECTRICIANS KE10H Indust/Site Srvs Steelworkers	Linear 4.13lHours
Factors 8.24 h	0.3612 May 2000 Earned Value Factor	4 2004E ISVS 064200] 4 206440 Torret
750 STRAIGHT TIME BASE	C020 ELECTRICIANS KE10H Indust/Site Srvs Steelworkers	1.38645 ISYS 0613001 1.386448 - Target Linear 4.32 Hours
Factors 8.62 h	0.3612 May 2000 Earned Value Factor	Lilleal 4.32IHouis
6.62 II	0.3012 May 2000 Earned Value Factor	1.38645 [SYS 061300] 1.386448 - Target
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers	Linear 1.99lHours
Factors 3.98 h	0.3612 May 2000 Earned Value Factor	Lillodi 1.3311 lodi 3
0.00	0.0012 May 2000 Earlied Value I dottel	1.38645 ISYS 0613001 1.386448 - Target
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers	Linear 1.66lHours
Factors 3.32 h	0.3612 May 2000 Earned Value Factor	
		1.38645 [SYS 061300] 1.386448 - Target
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers	Linear 0.33 Hours
Factors 0.66 h	0.3612 May 2000 Earned Value Factor	
		1.38645 [SYS 061300] 1.386448 - Target
750 STRAIGHT TIME BASE	C070 PAINTERS KE10H Indust/Site Srvs Steelworkers	Linear 1.99 Hours
Factors 3.98 h	0.3612 May 2000 Earned Value Factor	
		1.38645 [SYS 061300] 1.386448 - Target
750 STRAIGHT TIME BASE	C070 PAINTERS KE10H Indust/Site Srvs Steelworkers	Linear 3.41 Hours
Factors 6.8 h	0.3612 May 2000 Earned Value Factor	
TEO OTRAJOUT TIME RAGE	OCCORDITION DEPOSITION AND DIDEFITTEDO AND DIDEFITTEDO	1.38645 [SYS 061300] 1.386448 - Target
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers	Linear 1.08 Hours
Factors 2.16 h	0.3612 May 2000 Earned Value Factor	4 2004E ISVS 064200] 4 206440 Torret
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers	1.38645 [SYS 061300] 1.386448 - Target Linear 1.33 Hours
Factors 2.65 h	0.3612 May 2000 Earned Value Factor	Lineal
2.00	0.3012 May 2000 Lamed Value I actor	1.38645 [SYS 061300] 1.386448 - Target
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers	Linear 6.87lHours
Factors 13.71 h	0.3612 May 2000 Earned Value Factor	Elliodi Vioriliodio
	• • • • • • • • • • • • • • • • • • •	1.38645 [SYS 061300] 1.386448 - Target
750 STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL WORKE KE10H Indust/Site Srvs Steelworkers	Linear 2.93 Hours
Factors 5.86 h	0.3612 May 2000 Earned Value Factor	
		1.38645 [SYS 061300] 1.386448 - Target
750 STRAIGHT TIME BASE	R070 WASTE TREATMENT OPERATOR A KE10H Indust/Site Srvs Steelworkers	Linear 1.00 Hours
Factors 1.99 h	0.3612 May 2000 Earned Value Factor	
		1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C010 CARPENTERS KE10H Indust/Site Srvs Steelworkers	Linear 0.10 Hours
Factors 0.2 h	0.3612 May 2000 Earned Value Factor	
		1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C010 CARPENTERS KE10H Indust/Site Srvs Steelworkers	Linear 0.16 Hours
Factors 0.32 h	0.3612 May 2000 Earned Value Factor	
		1.38645 [SYS 061300] 1.386448 - Target

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Rocky Flats Closure Project

Proiect WBS Filter Baseline Devl

1EFB **Baseline Cost and Basis of Estimate** <u>Activi</u>ty Filter Starts In FY 751 OVERTIME BASE & PRE. C010 CARPENTERS KE10H Indust/Site Srvs Steelworkers 0.15 Hours Linear Factors 0.3612 May 2000 Earned Value Factor 1.38645 [SYS 061300] 1.386448 - Target 0.24 Hours 751 OVERTIME BASE & PRE C020 ELECTRICIANS KE10H Indust/Site Srvs Steelworkers Linear 0.48 h 0.3612 May 2000 Earned Value Factor Factors 1.38645 [SYS 061300] 1.386448 - Target 751 OVERTIME BASE & PRE C020 ELECTRICIANS KF10H Indust/Site Srvs Steelworkers 0.21 Hours Linear Factors 0.41 h 0.3612 May 2000 Earned Value Factor 1.38645 [SYS 061300] 1.386448 - Target OVERTIME BASE & PRE C020 ELECTRICIANS KE10H Indust/Site Srvs Steelworkers Linear 0.22 Hours 0.43 h 0.3612 May 2000 Earned Value Factor Factors 1.38645 [SYS 061300] 1.386448 - Target 751 OVERTIME BASE & PRE C040 MAINTENANCE MACHINIST (incl Exp | KE10H | Indust/Site Srvs Steelworkers Linear 0.02 Hours Factors 0.03 h 0.3612 May 2000 Earned Value Factor 1.38645 [SYS 061300] 1.386448 - Target 751 OVERTIME BASE & PRE C040 MAINTENANCE MACHINIST (incl Exp | KE10H | Indust/Site Srvs Steelworkers 0.09 Hours Linear Factors 0.17 h 0.3612 May 2000 Earned Value Factor 1.38645 [SYS 061300] 1.386448 - Target C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers 751 OVERTIME BASE & PRE. Linear 0.10 Hours Factors 0.2 0.3612 May 2000 Earned Value Factor h 1.38645 [SYS 061300] 1.386448 - Target C070 PAINTERS KE10H Indust/Site Srvs Steelworkers **OVERTIME BASE & PRE** Linear 0.17 Hours 0.34 h 0.3612 May 2000 Earned Value Factor Factors 1.38645 [SYS 061300] 1.386448 - Target C070 PAINTERS 751 OVERTIME BASE & PRE KE10H Indust/Site Srvs Steelworkers Linear 0.10 Hours 0.3612 May 2000 Earned Value Factor 0.2 Factors h 1.38645 [SYS 061300] 1.386448 - Target 751 OVERTIME BASE & PRE. C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers 0.06 Hours Linear 0.3612 May 2000 Earned Value Factor 0.11 h Factors 1.38645 [SYS 061300] 1.386448 - Target 751 OVERTIME BASE & PRE C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers 0.35 Hours Linear 0.3612 May 2000 Farned Value Factor Factors 0.69 h 1.38645 [SYS 061300] 1.386448 - Target 751 OVERTIME BASE & PRE C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers 0.07 Hours Linear Factors 0.13 h 0.3612 May 2000 Earned Value Factor 1.38645 [SYS 061300] 1.386448 - Target 751 OVERTIME BASE & PRE. C090 STRUCTURAL AND METAL WORKE | KE10H Indust/Site Srvs Steelworkers 0.15 Hours Linear 0.29 h 0.3612 May 2000 Earned Value Factor Factors 1.38645 [SYS 061300] 1.386448 - Target 751 OVERTIME BASE & PRE R070 WASTE TREATMENT OPERATOR A | KE10H | Indust/Site Srvs Steelworkers Linear 500 79 Hours May 2000 Earned Value Factor Factors 0.1 1.38645 [SYS 061300] 1.386448 - Target A5C SUPPLIES 0000 NONE C210S Facilities Mgmt & Maintenance Linear 266 08 Dollars

Line Item 1c - Corrective maintenance

Factors

523.47 d

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

0.3612 May 2000 Earned Value Factor

1 015

-- FY00 Escalation --

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1.38645 [SYS 061300] 1.386448 - Target

1EFB10
1EFB0390

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Proiect Baseline Devl WBS Filter 1EFB Activity Filter *

Starts In FY *

Approximately 290 corrective/routine maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Ad-hoc querry on MMS data, P&I 002a and spending variance reports.

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$327.65 average for this cluster

Unit Adjustment factor - .9783

Revised Unit Cost - 290 for this cluster Basis for adjustment - Meet KH Targets

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 32.31% (includes Linemen)

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

WBS No:

Activity ID:

Cost Element	Skill	Department	Curve	Ouantity Units
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	100.41 Hours
Factors 200.51 h	0.3612 May 2000 Earned V	Value Factor		
			1.38645 [SYS 0613	001 1.386448 - Target
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	66.94 Hours
Factors 133.67 h	0.3612 May 2000 Earned V	Value Factor		
			1.38645 [SYS 0613	001 1.386448 - Target
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	108.78 Hours
Factors 217.22 h	0.3612 May 2000 Earned \	Value Factor		
			1.38645 [SYS 0613	001 1.386448 - Target
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	145.04 Hours
Factors 289.62 h	0.3612 May 2000 Earned \	Value Factor		
				001 1.386448 - Target
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	33.47 Hours
Factors 66.84 h	0.3612 May 2000 Earned	Value Factor		
				001 1.386448 - Target
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	138.52 Hours
Factors 276.61 h	0.3612 May 2000 Earned	Value Factor		
	T I			001 1.386448 - Target
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	161.75 Hours
Factors 323 h	0.3612 May 2000 Earned	Value Factor	1 000 15 10 10 00 10	2014 202442 T
750 OTDAIGUT TIME DAGE	C040 MAINTENANCE MACHINIST	(incl Exp KE10H Indust/Site Srys Steelworkers		001 1.386448 - Target
750 STRAIGHT TIME BASE			Linear	66.94 Hours
Factors 133.67 h	0.3612 May 2000 Earned	value Factor	4 00045 1000 0040	001.4.000.440 T
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST	(incl Exp KE10H Indust/Site Srvs Steelworkers		001 1.386448 - Target
	0.3612 May 2000 Earned	· · · · · · · · · · · · · · · · · · ·	Linear	55.78 Hours
Factors 111.39 h	0.3612 May 2000 Earned	value racioi	1 20645 167/5 0642	001 1.386448 - Target
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST	(incl Exp KE10H Indust/Site Srvs Steelworkers	1.30045 1515 0613 Linear	11.43 Hours
	0.3612 May 2000 Earned		Linear	I I.43IMUUIS
Factors 22.82 h	0.3612 May 2000 Earned	value racioi	1 20645 167/5 0642	001 1.386448 - Target
		· · · · · · · · · · · · · · · · · · ·	1.30045 1515 0613	<u> </u>

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Ba
WBS Filter 1E
Activity Filter *

Baseline Devl 1EFB

1EFB0390	Baseline Cost and Basis of Estimate WBS Filter Activity Filte	1EFB , *	Starts In FY *
750 STRAIGHT TIME BASE	C070 PAINTERS KE10H Indust/Site Srvs Steelworkers	Linear	114.35 Hours
Factors 228.34 h	0.3612 May 2000 Earned Value Factor		
			3001 1.386448 - Target
750 STRAIGHT TIME BASE	C070 PAINTERS KE10H Indust/Site Srvs Steelworkers	Linear	66.94 Hours
Factors 133.67 h	0.3612 May 2000 Earned Value Factor	1 386/5 [SVS 061	3001 1.386448 - Target
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers	Linear	36.25 Hours
Factors 72.39 h	0.3612 May 2000 Earned Value Factor	, =111001	
		1.38645 [SYS 061	3001 1.386448 - Target
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers	Linear	44.62 Hours
Factors 89.11 h	0.3612 May 2000 Earned Value Factor	1 2064E ICVC 064	3001 1.386448 - Target
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers	1.30043 1313 001 Linear	230.61 Hours
Factors 460.49 h	0.3612 May 2000 Earned Value Factor	Linoui	200.011110010
		1.38645 [SYS 061	3001 1.386448 - Target
750 STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL WORKE KE10H Indust/Site Srvs Steelworkers	Linear	98.55 Hours
Factors 196.79 h	0.3612 May 2000 Earned Value Factor		
			3001 1.386448 - Target
751 OVERTIME BASE & PRE.	C010 CARPENTERS KE10H Indust/Site Srvs Steelworkers	Linear	3.35 Hours
Factors 6.68 h	0.3612 May 2000 Earned Value Factor	4 000 45 10 10 00	000] 4 000440 T
751 OVERTIME BASE & PRE.	C010 CARPENTERS KE10H Indust/Site Srvs Steelworkers	1.38645 ISYS 061 Linear	3001 1.386448 - Target 5.44 Hours
Factors 10.86 h	0.3612 May 2000 Earned Value Factor	Lilleai	5.44 Hours
10.00 11	0.0012 Way 2000 Earried Value I doloi	1 38645 [SYS 061	300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C010 CARPENTERS KE10H Indust/Site Srvs Steelworkers	Linear	5.02 Hours
Factors 10.03 h	0.3612 May 2000 Earned Value Factor		
		1.38645 [SYS 061	300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS KE10H Indust/Site Srvs Steelworkers	Linear	7.25 Hours
Factors 14.48 h	0.3612 May 2000 Earned Value Factor		
754 OVEDTIME DAGE & DDE	0000 515075101410	l I	300] 1.386448 - Target
751 OVERTIME BASE & PRE. Factors 16.15 h	C020 ELECTRICIANS KE10H Indust/Site Srvs Steelworkers 0.3612 May 2000 Earned Value Factor	Linear	8.09 Hours
Factors 16.15 h	0.3612 May 2000 Earned Value Factor	1 386/5 [SVS 061	3001 1.386448 - Target
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS KE10H Indust/Site Srvs Steelworkers	Linear	1.67 Hours
Factors 3.34 h	0.3612 May 2000 Earned Value Factor		1.071110010
		1.38645 [SYS 061	3001 1.386448 - Target
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS KE10H Indust/Site Srvs Steelworkers	Linear	6.93 Hours
Factors 13.83 h	0.3612 May 2000 Earned Value Factor		
			3001 1.386448 - Target
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers	Linear	2.79 Hours
Factors 5.57 h	0.3612 May 2000 Earned Value Factor	4 2004E IOVO 004	3001 1.386448 - Target
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers	1.36645 1313 061 Linear	3.35 Hours
Factors 6.68 h	0.3612 May 2000 Earned Value Factor	Lincal	0.001110013
	5.55.12 may 2555 25.1158 (3.85) doloi	1.38645 [SYS 061	3001 1.386448 - Target
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers	Linear	0.56 Hours
Factors 1.11 h	0.3612 May 2000 Earned Value Factor		
		l I	3001 1.386448 - Target
751 OVERTIME BASE & PRE.	C070 PAINTERS KE10H Indust/Site Srvs Steelworkers	Linear	5.72 Hours
Factors 11.42 h	0.3612 May 2000 Earned Value Factor		
		1.38645 [SYS 061	300] 1.386448 - Target

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl 1EFB

		Dasellile Cost allu Dasis	Activity Filter	*	Starts In FY *
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.35 Hours
Factors 6.68 h	0.3612 May 20	00 Earned Value Factor			
				1.38645 [SYS 061300	1 1.386448 - Target
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND I	PIPEFITTERS KE10H	Indust/Site Srvs Steelworkers	Linear	2.23 Hours
Factors 4.46 h	0.3612 May 20	00 Earned Value Factor			
				1.38645 [SYS 061300	1 1.386448 - Target
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND I	PIPEFITTERS KE10H	Indust/Site Srvs Steelworkers	Linear	11.53 Hours
Factors 23.02 h	0.3612 May 20	00 Earned Value Factor			
				1.38645 [SYS 061300	1 1.386448 - Target
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND I	PIPEFITTERS KE10H	Indust/Site Srvs Steelworkers	Linear	1.81 Hours
Factors 3.62 h	0.3612 May 20	00 Earned Value Factor			
				1.38645 [SYS 061300	1 1.386448 - Target
751 OVERTIME BASE & PRE.	C090 STRUCTURAL AN	D METAL WORKE KE10H	Indust/Site Srvs Steelworkers	Linear	4.93 Hours
Factors 9.84 h	0.3612 May 20	00 Earned Value Factor			
				1.38645 [SYS 061300	1 1.386448 - Target
A5C SUPPLIES	0000 NONE	C210S	Facilities Mamt & Maintenance	Linear	1.239.03 Dollars
Factors 2437.61 d	1.015 FY00	Escalation	0.3612 May 2000 Earned Value Factor		
				1.38645 [SYS 061300	1 1.386448 - Target
A5T TAXES	0000 NONE	C210S	Facilities Mamt & Maintenance	Linear	44.73 Dollars
Factors 1.015 FY00 Escalation	88 Dollars		0.3612 May 2000 Earned Value Factor		
				1.38645 [SYS 061300	1.386448 - Target

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 82 preventative maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Data Source - Maintenance Management System and P&I Reporting System CPRs and Spending variance reports for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$112.28 average

Unit Adjustment factor - FY99 is used as a base year. FY00 thru 05 are expectred to require the same level of effort as FY99

Revised number of work orders -None

Basis for adjustment -None

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Cost Element

Maint. Mech 37.50%

Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	71.53 Hours
Factors 142.84 h	0.3612 May 2000 Earned	d Value Factor		
			1 38645 [SVS 061300	1] 1 386//8 - Target

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Baseline Devl WBS Filter 1EFB

15550390	Racolina Cost a	nd Basis of Estimate	IEFD	
	Daseille Cost a	Activity Filter	*	Starts In FY *
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear	53.65 Hours
Factors 107.13 h	0.3612 May 2000 Earned Value Fa	ctor		
			1.38645 [SYS 06130	01 1.386448 - Target
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	8.19 Hours
Factors 16.35 h	0.3612 May 2000 Earned Value Fa	ctor		
			1.38645 [SYS 06130	01 1.386448 - Target
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	3.58 Hours
Factors 7.14 h	0.3612 May 2000 Earned Value Fa	ctor		
			1.38645 [SYS 06130	01 1.386448 - Target
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear	2.68 Hours
Factors 5.36 h	0.3612 May 2000 Earned Value Fa	ctor		
			1.38645 [SYS 06130	01 1.386448 - Target
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	0.41 Hours
Factors 0.82 h	0.3612 May 2000 Earned Value Fa	ctor		
			1.38645 [SYS 06130	01 1.386448 - Target
A5C SUPPLIES	0000 NONE	C210S Facilities Mamt & Maintenance	Linear	530.55 Dollars
Factors 1.015 FY00 Escalation	1043.78 d	0.3612 May 2000 Earned Value Factor		

Line Item 3a - Preventive maintenance

1.38645 [SYS 061300] 1.386448 - Target

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

Approximately 144 preventative maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$95.35 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 74% of the FY 99 budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficency return.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50%

Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

- Contribution			ci :n		Demonstration	Commen	0	T.T., 14
5	Cost Element Skill			<u>Department</u>	Curve	Ouantity	Units	
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	100.55	Hours
Factors	200.78 h		0.3612 May 2000 Earned Value Fac	ctor				
						1.38645 [SYS 06130	01 1.386448 - Ta	arget
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	75.41	Hours
Factors	150.59 h		0.3612 May 2000 Earned Value Fac	ctor				
		1.38645 [SYS 06130	01 1.386448 - Ta	arget				

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Rocky Flats Closure Project Resoling Cost and Resis of Estimate

Proiect WBS Filter

Baseline Devl 1EFB

	Daseille Cost at	iu basis oi Estillate	Activity Filter *	Starts In FY *
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworker	rs Linear	11.51 Hours
Factors 22.98 h	0.3612 May 2000 Earned Value Fac	ctor		
			1.38645 [SYS 06	13001 1.386448 - Target
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworker	rs Linear	5.03 Hours
Factors 10.04 h	0.3612 May 2000 Earned Value Fac	ctor		
			1.38645 [SYS 06	13001 1.386448 - Target
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworker	rs Linear	3.77 Hours
Factors 7.53 h	0.3612 May 2000 Earned Value Fac	ctor		
			1.38645 [SYS 06	13001 1.386448 - Target
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworker	rs Linear	0.58 Hours
Factors 1.15 h	0.3612 May 2000 Earned Value Fac	ctor		
			1.38645 [SYS 06	13001 1.386448 - Target
A5C SUPPLIES	0000 NONE	C210S Facilities Mamt & Maintenan	nce Linear	745.75 Dollars
Factors 1467.16 d	1.015 FY00 Escalation	0.3612 May 2000 Earned	l Value Factor	
			1.38645 [SYS 06	1300] 1.386448 - Target

Line Item 3b - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 18 preventative maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Data Source - MMS and P&I Reporting System SVAR for FY98 Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$30.28 average in this cluster

Adjustment factor - FY99 is used as a base year. FY00 thru 05 are equal to FY99 scope

Revised number of work orders - No Change Basis for adjustment - Directed targets.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50% Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es	S Cost Element			Skill		Department	Curve	<i>Ouantity</i>	Units
	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.99	Hours
	Factors	7 96 h		0.3612 May 2000 Farned Value Fac	tor				

						1.38645 [SYS 06130	01 1.386448 - Target
750	STRAIGHT TIME BASE	C040 MAINTEN	ANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	2.99 Hours
Factor	s 5.97 h	0.3612	May 2000 Earned Value Fac	ctor			

1.38645 [SYS 061300] 1.386448 - Target

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter

Baseline Devl 1EFB

	Baselille Cost a	and basis of Estimate	Activity Filter *		Starts In FY *
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworke	ers	Linear	0.46 Hours
Factors 0.91 h	0.3612 May 2000 Earned Value F	actor			
			1.38	8645 [SYS 061300	01 1.386448 - Target
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworke	ers	Linear	0.20 Hours
Factors 0.4 h	0.3612 May 2000 Earned Value F	actor			
			1.38	8645 [SYS 061300	01 1.386448 - Target
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Ext	KE10H Indust/Site Srvs Steelworke	ers	Linear	0.15 Hours
Factors 0.3 h	0.3612 May 2000 Earned Value F	actor			
			1.38	8645 [SYS 061300	01 1.386448 - Target
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworke	ers	Linear	0.03 Hours
Factors 0.05 h	0.3612 May 2000 Earned Value F	actor			
			1.38	8645 [SYS 061300	01 1.386448 - Target
A5C SUPPLIES	0000 NONE	C210S Facilities Mamt & Maintena	nce	Linear	29.56 Dollars
Factors 58.16 d	1.015 FY00 Escalation	0.3612 May 2000 Earned	d Value Factor		
			1.38	8645 [SYS 061300	0] 1.386448 - Target

Line Item 3c - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

Approximately 216 preventative maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Data Source - MMS and P&I Reporting System SVAR for FY98
Item Desc - Fiscal Year Preventive Maintenance
Breakdown of Data:
Item - Preventive maintenance
Units - Work Packages
Unit Cost - \$75.11 average in this cluster
Unit Adjustment factor - .9783
Revised Unit Cost - 216 for this cluster

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Basis for adjustment - Meet KH Targets

Maint. Mech 37.50% Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es		Cost Element		Skill		Department	Curve	Quantity Units
	750	STRAIGHT TIME BASE	C020	C020 ELECTRICIANS		Indust/Site Srvs Steelworkers	Linear	133.88 Hours
	Factors	267.34 h		0.3612 May 2000 Earned Value Fac	tor			
_							1.38645 [SYS 06130	0] 1.386448 - Target
	750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	100.41 Hours
	Factors	200.51 h		0.3612 May 2000 Earned Value Fac	tor			
_							1.38645 [SYS 06130	0] 1.386448 - Target
	750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	15.32 Hours
	Factors	30.59 h		0.3612 May 2000 Earned Value Fac	tor			
_							1.38645 [SYS 06130	01 1.386448 - Target

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Baseline Devl WBS Filter 1EFB

				Baseline Cost ar	ia Basis	or Estimate	Activity Filter	*	Starts In FY *
751	OVERTIME BASE & PRE.	C020	ELECTRIC	CIANS	KE10H	Indust/Site Srvs Steelworkers	S	Linear	6.70 Hours
Factors	13.37 h		0.3612	May 2000 Earned Value Fac	ctor				
_								1.38645 [SYS 061300	01 1.386448 - Target
751	OVERTIME BASE & PRE.	C040	MAINTEN	ANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	S	Linear	5.02 Hours
Factors	10.03 h		0.3612	May 2000 Earned Value Fac	ctor				
								1.38645 [SYS 061300)l 1.386448 - Target
751	OVERTIME BASE & PRE.	C080	PLUMBER	S AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	S	Linear	0.77 Hours
Factors	1.53 h		0.3612	May 2000 Earned Value Fac	ctor				
					,	T.		1.38645 [SYS 061300	01 1.386448 - Target
A5C	SUPPLIES	0000	NONE		C210S	Facilities Momt & Maintenand	ce	Linear	137.67 Dollars
Factors	1.015 FY00 Escalation		270.85	d		0.3612 May 2000 Earned	Value Factor		
_								1.38645 [SYS 061300	01 1.386448 - Target
A5T	TAXES	0000	NONE		C210S	Facilities Mamt & Maintenand	ce	Linear	5.08 Dollars
Factors	1.015 FY00 Escalation		10	Dollars		0.3612 May 2000 Earned	Value Factor		

rtivity ID: 1EER0305 Description: Security Bldge Cluster Landlard Functions EV01

1.38645 [SYS 061300] 1.386448 - Target

Cost Risk 2 Schedule Risk

Activity ID: 1EF	-Bu395 Description: Security Blags Cluster Lan	alora Functio		Cost Risk 2 Schedule Risk 1								
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
1	Corrective maintenance	1.00	each	HC	1.475	1.475	31.773	8.480	0	40.253	15.156	55.409
1a	Corrective maintenance	0.74	each	HC	2.073	1.534	33.079	8.820	0	41.899	15.778	57.677
1b	Corrective maintenance	0.98	each	HC	2.760	2.701	58.242	2.230	0	60.473	27.782	88.254
1c	Corrective maintenance	1.00	each	HC	82	82	1,771	473	0	2,243	845	3,088
3	Preventive maintenance	1.00	each	HC	249	249	5,450	942	0	6,392	2,600	8,992
3a	Preventive maintenance	0.74	each	HC	350	259	5,669	980	0	6,649	2,704	9,353
3b	Preventive maintenance	0.98	each	HC	465	455	9,979	248	0	10,227	4,760	14,988
3c	Preventive maintenance	1.00	each	HC	14	14	304	52	0	356	145	501
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	12,604	12,604	0	12,604
Total for Activity 1EFB0395:							146,268	22,226	12,604	181,098	69,770	250,867

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 116 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$488.44 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY90 thru 05 are expectred to require the same level of effort as FY99

Revised number of work orders -None

Basis for adjustment -None

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 30.77% (includes Linemen)

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08%

Metal Worker 4.62%

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl 1EFB

Starts In FY *

Stationary Operating Engineer 1.54%

3	Cost Element	Skill	Department	Curve	<i>Quantity</i> U							
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	95.28 Ho							
Factors	107.13 h											
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 ISYS 0614 Linear	4001 .88934200 - Svst 63.52 Ho							
Factors	71.42 h	1 COTO ICARPENTERS	RETURN IIII III III III III SIVS SLEEIWOIKEIS	Lilleal	03.3211100							
				0.88934 [SYS 061-	4001 .88934200 - Svs							
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	103.22 Ho							
Factors	116.06 h			0.0004 1000	4001 0000 4000 0							
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	0.88934 ISYS 0614 Linear	4001 .88934200 - Svst 137.63 Hot							
Factors	154.75 h	CO20 JELECTRICIANS	RETUR IIIIdus//Site SIVS Steetworkers	Lilleal	137.03 110							
1 401075	101.70 11			0.88934 [SYS 061 ₄	4001 .88934200 - Svst							
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	131.44 Hou							
Factors	147.79 h											
					4001 .88934200 - Svst							
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	153.48 Hou							
Factors	tors 172.58 h 0.88934 [SYS 061400] .88934200 - System											
750	STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIS	ST (incl Exp KE10H Indust/Site Srvs Steelworkers	0.00934 1313 0014 Linear	63.52 Hot							
Factors	71.42 h		THIS EXE THE TOTAL INCOME.		00.021110							
				0.88934 [SYS 061-	4001 .88934200 - Svs							
750	STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIS	ST (incl Exp KE10H Indust/Site Srvs Steelworkers	Linear	52.93 Ho							
Factors												
	0	0.00	T. (4001 .88934200 - Svst							
750	STRAIGHT TIME BASE	1 C040 IMAINTENANCE MACHINIS	ST (incl Exp KE10H Indust/Site Srvs Steelworkers	Linear	10.58 Hou							
Factors	11.9 h			0.88934 [SVS.061.	4001 .88934200 - Svst							
750	STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	63.52 Ho							
Factors	71.42 h											
				0.88934 [SYS 061	4001 .88934200 - Svst							
750	STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	108.50 Ho							
Factors	122 h											
750	OTRAIGUE TIME DAGE	C080 PLUMBERS AND PIPEFIT	TERS KD10H 776 Complex Steelworkers	0.88934 ISYS 0614 Linear	4001 .88934200 - Svst 218.81 Hou							
Factors	STRAIGHT TIME BASE 246.04 h	1 C080 IPLUMBERS AND PIPEFIT	TERS KD10H 776 Complex Steelworkers	Linear	218.81IH0I							
1 aciors	240.04 11			0.88934 [SYS 061 ₄	4001 .88934200 - Svs							
750	STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFIT	TERS KE10H Indust/Site Srvs Steelworkers	Linear	42.34 Ho							
Factors	47.61 h											
	I				400] .88934200 - Syst							
750	STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFIT	TERS KE10H Indust/Site Srvs Steelworkers	Linear	34.40 Hou							
Factors	38.68 h			0.00004 501/0.004	4001 0000 4000 0 :							
750	STRAIGHT TIME BASE	COOL STRUCTURAL AND META	AL WORKE KE10H Indust/Site Srvs Steelworkers		400] .88934200 - Syst 93.51 Hou							
Factors	105.15 h	I CU90 ISTRUCTURAL AND META	AL WORKE KETUH INQUST/SITE STVS STEETWORKERS	Linear	93.51 H0l							
1 401018	100.10 11			0.88934 [SYS 061	400] .88934200 - Syst							
	1			0.0000T [010 001								
750	STRAIGHT TIME BASE	R070 WASTE TREATMENT OPI	ERATOR A KE10H Indust/Site Srvs Steelworkers	Linear	31.76 Hou							

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter

Baseline Devl 1EFB

	Baseline Cost a	nd Basis of Estimate Activity Filter	* Starts In FY *
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 5.16 Hours
Factors 5.8 h			0.0004 701/0.007
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srys Steelworkers	0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE. Factors 5.36 h	I CUTU ICARPENTERS	NETUR IINQUST/SITE STVS STEETWORKERS	Linear 4.77 Hours
raciois 3.30 II			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 3.17 Hours
Factors 3.57 h			
			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 7.68lHours
Factors 8.63 h			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 6.57 Hours
Factors 7.39 h			
			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 6.88 Hours
Factors 7.74 h			0.00004 [CVC.004.400] 00004000 0
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Stys Steelworkers	0.88934
Factors 2.98 h	1 CO-TO IIVIAIIN I EINAINOE IVIACI IIINIST (IIICI EXL	TILL TOTT IIII QUISIONE SIVS SIEENWOINEIS	Linear 2.031Hours
			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear 0.53 Hours
Factors 0.6 h			
754 OVEDTIME DAGE & DDE	C040 MAINTENANCE MACHINIST (incl Exp	1/54011 I. J. 1/0% O. O. J. J.	0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE. Factors 3.57 h	C040 IMAINTENANCE MACHINIST (INCLEXE	KE10H Indust/Site Srvs Steelworkers	Linear 3.17 Hours
raciors 5.57 II			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear 5.42 Hours
Factors 6.1 h			
			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear 3.17 Hours
Factors 3.57 h			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear 1.72 Hours
Factors 1.93 h		THE STATE OF THE S	11121110013
			0.88934 ISYS 0614001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear 10.94 Hours
Factors 12.3 h			
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srys Steelworkers	0.88934
Factors 2.38 h	I CUOU IPLUIVIDERS AIND PIPEFITTERS	NETUT IIIQUSI/SILE SIVS SLEEIWUTKEIS	Lineai 2.12IHours
2.00 11			0.88934 ISYS 0614001 .88934200 - System
751 OVERTIME BASE & PRE.	C090 STRUCTURAL AND METAL WORKE	KE10H Indust/Site Srvs Steelworkers	Linear 4.68 Hours
Factors 5.26 h			
	Dono Lucote TDE ATMENT CONTROL	1/51011 t 1 1/01/ 0 0: 1 1	0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	R070 WASTE TREATMENT OPERATOR A	KE10H IIndust/Site Srvs Steelworkers	Linear 1.59 Hours
Factors 1.79 h			
			0.88034 [SVS.061400] 88034200 Systom
A5C SUPPLIES	0000 NONE	C210S Facilities Mgmt & Maintenance	0.88934 ISYS 0614001 .88934200 - System Linear 8.479.82 Dollars
A5C SUPPLIES Factors 9394.03 d	0000 NONE 1.015 FY00 Escalation	C210S Facilities Momt & Maintenance	0.88934

Line Item 1a - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily

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1EFB10 1EFB0395 Activity ID:

WBS No:

Rocky Flats Closure Project Baseline Cost and Basis of Estimate Proiect WBS Filter

1EFB Activity Filter

Baseline Devl

Starts In FY

Quantity

Curve

Units

predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 123 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$686.56 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 74% of the FY 99 budget per FCP 1999-8064

Department

Basis for adjustment - FCP 1999-8064 funding efficency return.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 32.31% (includes Linemen)

Cost Element

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Etement	Skiii	Department	Curve	Outility Onlis
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	133.93 Hours
Factors 150.59 h				
			0.88934 [SYS 0614	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	89.28 Hours
Factors 100.39 h				
			0.88934 [SYS 0614	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	145.09 Hours
Factors 163.14 h				
			0.88934 [SYS 0614	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	193.44 Hours
Factors 217.51 h				
			0.88934 [SYS 0614	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	215.74 Hours
Factors 242.58 h				
			0.88934 [SYS 0614	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	44.64 Hours
Factors 50.2 h				
			0.88934 [SYS 0614	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	184.75 Hours
Factors 207.74 h				
			0.88934 [SYS 0614	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (ii	ncl Exp KE10H Indust/Site Srvs Steelworkers	Linear	14.88 Hours
Factors 16.73 h				
			0.88934 [SYS 0614	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (i	ncl Exp KE10H Indust/Site Srvs Steelworkers	Linear	74.40 Hours
Factors 83.66 h				
			0.88934 [SYS 0614	001 .88934200 - Svstem

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Factors

750 STRAIGHT TIME BASE

100.39 h

750 STRAIGHT TIME BASE

Factors 171.49 h

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

C070 PAINTERS

Baseline Devl Proiect 1EFB WBS Filter Activity Filter Starts In FY C040 MAINTENANCE MACHINIST (incl Exp | KE10H | Indust/Site Srvs Steelworkers 89.28 Hours Linear 0.88934 [SYS 061400] .88934200 - System 152.51 Hours KE10H Indust/Site Srvs Steelworkers 0.88934 [SYS 061400] .88934200 - System

			0.88934 ISYS 061400	JI .88934200 - System
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	89.28 Hours
Factors 100.39 h				
TEO OTRAIGUIT TIME RAGE	OCCO DI LIMPEDO AND DIDEFITTEDO	1/540H 1 1/0'/ 0 0/ 1 1	0.88934 [SYS 061400	01 .88934200 - Svstem 48.34 Hours
750 STRAIGHT TIME BASE Factors 54.36 h	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	48.34IHours
<i>Factors</i> 54.36 II			0.88934 [SYS 061400	01 88934200 - System
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	307.57 Hours
Factors 345.84 h				
			0.88934 [SYS 061400	
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	59.52 Hours
Factors 66.93 h				
750 STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL WORKE	VEAUL Indust/Cita Crus Ctanhundura	0.88934 [SYS 061400 Linear	01 .88934200 - Svstem 131.44 Hours
750 STRAIGHT TIME BASE Factors 147.79 h	1 C090 ISTRUCTURAL AND METAL WORKE	KETUH IIndust/Site Srvs Steelworkers	Linear	131.44IHours
147.79 11			0.88934 [SYS 061400	01 88934200 - System
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	6.70 Hours
Factors 7.53 h				
			0.88934 [SYS 061400	0] .88934200 - System
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	4.46 Hours
Factors 5.02 h			0.88934 [SYS 061400	01 00024200 System
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	0.86934 S 1 S 1 S 1 O O O O O O O O O O O O O O	7.26 Hours
Factors 8.16 h	TOTO JONINI ENTERIO	TE 1011 IIIIdday Olic Olya Olicelworkera	Eiricai	7.201110013
			0.88934 [SYS 061400	0] .88934200 - System
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	2.98 Hours
Factors 3.35 h				
	0000 515050101010	1/5/01/ 1 //6/ 0 0 1 1	0.88934 ISYS 061400	01 .88934200 - Svstem
751 OVERTIME BASE & PRE. Factors 10.88 h	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	9.68 Hours
Factors 10.88 h			0.88934 [SYS 061400	11 8803/1200 - System
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	U.00934 1313 001400	10.79 Hours
Factors 12.13 h	TOUR TEED HAD ALL	TILE 1011 IIIIMMOVOINO SI 10 SAOSIMOINOIS		10.7 011 10010
			0.88934 [SYS 061400	
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	9.24 Hours
Factors 10.39 h				
		1/5/01/ L 1/01/ 0 0/ L 1	0.88934 ISYS 061400	01 .88934200 - Svstem 0.75 Hours
751 OVERTIME BASE & PRE. Factors 0.84 h	C040 MAINTENANCE MACHINIST (incl Exp.	KE10H Indust/Site Srvs Steelworkers	Linear	0.75lHours
Factors 0.84 h			0.88934 [SYS 061400	11 8803/1200 - System
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp.	KE10H Indust/Site Srvs Steelworkers	0.86934 1313 061400 Linear	4.46 Hours
Factors 5.02 h		THE STATE OF THE S		
			0.88934 ISYS 061400	
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear	3.72 Hours
Factors 4.18 h				
			0.88934 [SYS 061400	0] .88934200 - System

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Rocky Flats Closure Project Recoling Cost and Resis of Estimate

Proiect WBS Filter Baseline Devl 1EFB

		Baseline Cost an	d Basis	of Estimate	Activity Filter *		Starts In FY *
751 OVERTIME BASE &	PRE. C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	S	Linear	7.62 Hours
Factors 8.57 h							
						0.88934 [SYS 0	0614001 .88934200 - Svsten
751 OVERTIME BASE &	PRE. C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	S	Linear	4.46 Hours
Factors 5.02 h							
		_				0.88934 [SYS 0	0614001 .88934200 - Svsten
751 OVERTIME BASE &	PRE. C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	S	Linear	2.42 Hours
Factors 2.72 h							
		_				0.88934 [SYS 0	0614001 .88934200 - Svsten
751 OVERTIME BASE &	PRE. C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	S	Linear	15.38 Hours
Factors 17.29 h							
		_				0.88934 [SYS 0	0614001 .88934200 - Svsten
751 OVERTIME BASE &	PRE. C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	S	Linear	6.57 Hours
Factors 7.39 h							
		_				0.88934 [SYS 0	0614001 .88934200 - Svsten
751 OVERTIME BASE &	PRE. R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	S	Linear	2.23 Hours
Factors 2.51 h							
						0.88934 [SYS 0	0614001 .88934200 - Svsten
A5C SUPPLIES	0000	NONE	C210S	Facilities Momt & Maintenand	ce	Linear	11.919.40 Dollar

Line Item 1b - Corrective maintenance

Factors 13204.4 d

0.88934 [SYS 061400] .88934200 - System

0.88934 [SYS 061400] .88934200 - System

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 290 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98 Item Desc - Ad-hoc querry on MMS data, P&I 002a and spending variance reports. Breakdown of Data: Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$327.65 average for this cluster

Unit Adjustment factor - .9783

Revised Unit Cost - 290 for this cluster Basis for adjustment - Meet KH Targets

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 32.31% (includes Linemen)

Maint. Mech 13.85% Painter 10 77% Pipefitter 23.08% Metal Worker 4.62%

Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

1.015 -- FY00 Escalation --

Resources

s		Cost Element		Skill	Department	Curve	Quantity	Units
	750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	118.88	Hours
	Factors	133.67 h						

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Ba
WBS Filter 1E
Activity Filter *

Baseline Devl 1EFB

1EFB0395	Baseline Cost	and Basis of Estimate	WBS Filter 1EFB Activity Filter *	Starts In FY *
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelwork		193.18 Hours
Factors 217.22 h				
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelwork		1001 .88934200 - Svstem 178.32 Hours
Factors 200.51 h	1 COTO ICARPENTERS	RETURN IIII IIII IIII III III III III III II	ers Linear	170.32IHUUIS
			0.88934 [SYS 0614	1001 .88934200 - Svsten
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwork	ers Linear	287.26 Hours
Factors 323 h			0.00004 100/0.004	1001 0000 1000 0 1
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwork		1001 - 88934200 - Svsten 246.00 Hours
Factors 276.61 h	TOOLO ILLEO II MONARO	TALTOTT IIIIdddyolic olyd oleciwolix	org Enrodi	240.001110013
				1001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwork	ers Linear	59.44 Hours
Factors 66.84 h			0.00024 ISVS 0644	1001 .88934200 - Svsten
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwork		257.57 Hours
Factors 289.62 h	TOTAL MELECITIVE MANAGEMENT AND ADMINISTRATION OF THE PROPERTY			
				1001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Ex	p KE10H Indust/Site Srvs Steelwork	ers Linear	118.88lHours
Factors 133.67 h			0.90034 ISVS 0614	1001 .88934200 - Svsten
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Ex	p KE10H Indust/Site Srvs Steelwork	ers Linear	99.06 Hours
Factors 111.39 h				
				100] .88934200 - Systen
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Ex	p KE10H Indust/Site Srvs Steelwork	ers Linear	20.29 Hours
Factors 22.82 h			0.88034 [CVC.0617	100] .88934200 - Systen
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelwork		203.07 Hours
Factors 228.34 h				
				100] .88934200 - Systen
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelwork	ers Linear	118.88 Hours
Factors 133.67 h			0.88034 [575.0617	1001 .88934200 - Svsten
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwork		64.38 Hours
Factors 72.39 h				
				1001 .88934200 - Svsten
750 STRAIGHT TIME BASE Factors 460.49 h	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwork	ers Linear	409.53 Hours
Factors 460.49 h			0.88934 [SYS.0614	1001 .88934200 - Svsten
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwork		79.25 Hours
Factors 89.11 h				
				1001 .88934200 - Svsten
750 STRAIGHT TIME BASE Factors 196,79 h	C090 STRUCTURAL AND METAL WORKE	KE10H Indust/Site Srvs Steelwork	ers Linear	175.01 Hours
190.79 II			0.88934 [SYS.0614	1001 .88934200 - Svsten
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelwork		5.94 Hours
Factors 6.68 h				
			0.88934 ISYS 0614	1001 .88934200 - Systen
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelwork	ers Linear	9.66 Hours
Factors 10.86 h				

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filter

Baseline Devl 1EFB

1EFB0393	Baseline Cost	and Basis of Estimate Activity File Activity File	· - · -	Starts In FY *
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	8.92 Hours
Factors 10.03 h			0.00024 [CVC.004.44	001 0000 4000 Cyctom
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srys Steelworkers	0.88934 1515 06140 Linear	001 .88934200 - Svstem 14.36 Hours
Factors 16.15 h				
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srys Steelworkers	0.88934 [SYS 06140 Linear	001 .88934200 - Svsten 12.30 Hours
Factors 13.83 h	1 COZO IELECTINICIANO	1 IXE TOTT IIII III III III III III III III I	Lilleal	12.301110013
			0.88934 [SYS 06140	01 .88934200 - Svsten
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	12.88 Hours
Factors 14.48 h			0.88934 [SYS 06140	101 88934200 - Syster
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	2.97 Hours
Factors 3.34 h				
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl E)	WE4011 Indicat/Oite Court Oterahouse		001 .88934200 - Svsten 4.95 Hours
751 OVERTIME BASE & PRE. Factors 5.57 h	1 C040 IMAINTENANCE MACHINIST (Incl. E)	XD KETUH Indust/Site Srvs Steelworkers	Linear	4.95IHOUR
0.01			0.88934 [SYS 06140	001 .88934200 - Svster
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Ex	XD KE10H Indust/Site Srvs Steelworkers	Linear	5.94 Hours
Factors 6.68 h			0.00004 [0)/0.0044/	001 00004000 0
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Ex	xn KE10H Indust/Site Srys Steelworkers	0.88934 [SYS 06140 Linear	0.99 Hours
Factors 1.11 h	1 00 10 JAW CHATELA CHOCK WINCO THAT CALL	TILE TOTAL IMMEGGING CITYO CLOCKWOTKOTO	Linour	0.00110010
			0.88934 [SYS 06140	
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	10.16 Hours
Factors 11.42 h			0.88934 [SYS 06140	101 88934200 - Sveter
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	5.94 Hours
Factors 6.68 h				
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 06140 Linear	00] .88934200 - Syster 3.22 Hours
Factors 3.62 h	1 C080 IPLUMBERS AND PIPEFITTERS	RETURN IIII dust/Site Sivs Steelworkers	Linear	3.22IFIOUIS
			0.88934 [SYS 06140	01 .88934200 - Svster
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	20.47 Hours
Cactors 23.02 h			0.00034 [CVC.06444	001 00004000 Cychor
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srys Steelworkers	0.88934 [SYS 06140 Linear	3.97 Hours
Factors 4.46 h		THE TOTAL INITIALITY OF THE CONTROLLED	Lilloui	0.071110410
			0.88934 [SYS 06140	
751 OVERTIME BASE & PRE.	C090 STRUCTURAL AND METAL WORK	E KE10H Indust/Site Srvs Steelworkers	Linear	8.75 Hours
actors 9.84 h			0.88934 [SYS 06140	101 88934200 - Sveter
A5C SUPPLIES	0000 NONE	C210S Facilities Momt & Maintenance	Linear	2.200.39 Dolla
Factors 1.015 FY00 Escalation	2437.61 d			
	T acce brown	00400 5 11111 14 4 0 14 4 4	0.88934 ISYS 06140	
A5T TAXES Factors 1.015 FY00 Escalation	l 0000 INONE 88 Dollars	C210S Facilities Momt & Maintenance	Linear	79.44 Dollar
T.013 FTOU ESCARATION	00 Dullais		0.88934 [SYS 06140	001 .88934200 - Svster
			1.1113. 10.0 00110	

Line Item 1c - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect B
WBS Filter 1
Activity Filter *

Baseline Devl 1EFB

Starts In FY

was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

Approximately 16 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$209.25 average for this cluster

Adjustment factor - FY99 is used as a base year. FY00 thru 05 are equal to FY99 scope

Revised number of work orders - No Change Basis for adjustment - Directed targets.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 30.77% (includes Linemen)

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department	Curve	Ouantity Units
750 STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.75 Hours
Factors 6.47 h						
		T		T	0.88934 [SYS 06140	01 .88934200 - Svstem
750 STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.31 Hours
Factors 5.97 h						
	1	1		T		01 .88934200 - Svstem
750 STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.54 Hours
Factors 3.98 h						
		T		T		01 .88934200 - Svstem
750 STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	7.67 Hours
Factors 8.62 h						
TEO OTRAIGUE TIME RAGE	0000	EL ECTRICIANIO	1/54011	1 1 1/0% 0 00 1 1		01 .88934200 - Svstem
750 STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	7.33lHours
Factors 8.24 h					0.00024 [CVC 064.40	01 .88934200 - Svstem
750 STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	0.88934 1515 06140 Linear	8.56 Hours
Factors 9.62 h	1 0020	ILLECTRICIANS	KLIUII	IIIdus//Site Sivs Steelworkers	Lilled	8.30II IOUIS
140075 3.02 11					0.88934 [SVS.06140	01 .88934200 - System
750 STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KF10H	Indust/Site Srvs Steelworkers	Linear	0.59 Hours
Factors 0.66 h					E 1112341	21221112312
					0.88934 [SYS 06140	01 .88934200 - Svstem
750 STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	2.95 Hours
Factors 3.32 h						
					0.88934 [SYS 06140	01 .88934200 - Svstem
750 STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	3.54 Hours
Factors 3.98 h						
	1	T		1	0.88934 [SYS 06140	01 .88934200 - Svstem
750 STRAIGHT TIME BASE	C070	PAINTERS	KD10H	776 Complex Steelworkers	Linear	6.05 Hours
Factors 6.8 h						
,					0.88934 [SYS 06140	01 .88934200 - Svstem

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Ba
WBS Filter 1E
Activity Filter *

Baseline Devl 1EFB

1EFB0395	Baseline Cost ar	nd Basis of Estimate	WBS Filter 1EFB Activity Filter *	Starts In FY *
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers		3.54 Hours
Factors 3.98 h			0.00024 ISVS 064	4001 00034300 Cyctom
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers		4001 .88934200 - Svstem 12.19 Hours
Factors 13.71 h				
750 OTDAIGHT TIME DAGE	COOR DILLIADEDC AND DIDEFITTEDC	I/E4011 In thirt/Oite Court Ote about law		4001 .88934200 - Svstem 1.92 Hours
750 STRAIGHT TIME BASE Factors 2.16 h	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	s Linear	1.92IHOUIS
2.10			0.88934 [SYS 061	4001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers		2.36 Hours
factors 2.65 h			0.88034 [575.064	4001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL WORKE	KE10H Indust/Site Srvs Steelworkers		5.21 Hours
Cactors 5.86 h				
750 OTDAIGUIT TIME DAGE	DOTO MA OTE TOP ATMENT OPERATOR A			4001 .88934200 - Svstem
750 STRAIGHT TIME BASE Factors 1.99 h	I R070 WASTE TREATMENT OPERATOR A	KE10H Indust/Site Srvs Steelworkers	Linear	1.77 Hours
1.00			0.88934 [SYS 061	4001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	0.18 Hours
Factors 0.2 h				
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers		4001 .88934200 - Svstem 0.28 Hours
Factors 0.32 h	COTO JOANI ENTENO	_ INC TOTT III dust/Oile Oilys Oleel WOINETS	Linear	0.20 110013
				400] .88934200 - System
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	<u>Linear</u>	0.27 Hours
Factors 0.3 h			0.88034 1575 061	400] .88934200 - System
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers		0.43 Hours
Factors 0.48 h				
		T.,_,,,,		400] .88934200 - System
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	S Linear	0.36 Hours
Factors 0.41 h			0.88934 [SYS 061	4001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers		0.38 Hours
Factors 0.43 h				
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp.	I/E4011 Indust/Cita Crus Stanburgham	0.88934 [SYS 061 Linear	4001 .88934200 - Svstem 0.15 Hours
Factors 0.17 h	1 C040 IMAINTENANCE MACHINIST (Inc. Exp.	KETOH IIIIdust/Site Sivs Steelworkers	Linear	U. ISIMOUIS
			0.88934 [SYS 061	4001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp.	KE10H Indust/Site Srvs Steelworkers	Linear	0.03 Hours
factors 0.03 h			0.00004 10000	4001 00004000 0
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srys Steelworkers	0.88934 ISYS 061	4001 .88934200 - Svstem 0.18 Hours
Factors 0.2 h			<u> </u>	
1				4001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	0.30 Hours
Factors 0.34 h			120 2V2] NEDRR N	4001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers		0.18 Hours
Factors 0.2 h				
			0.88934 [SYS 061	400] .88934200 - System

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl

121 00000	Baseline Cost and Basis of Estimate		Activity Filter *	Starts In FY *
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwo	rkers Linear	0.10 Hours
Factors 0.11 h				
			0.88934 [SYS 061	4001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwo	rkers Linear	0.61 Hours
Factors 0.69 h				
			0.88934 ISYS 061	4001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwo	rkers Linear	0.12 Hours
Factors 0.13 h				
			0.88934 ISYS 061	4001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C090 STRUCTURAL AND METAL WORKE	KE10H Indust/Site Srvs Steelwo	rkers Linear	0.26 Hours
Factors 0.29 h				
			0.88934 [SYS 061	4001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	R070 WASTE TREATMENT OPERATOR A	KE10H Indust/Site Srvs Steelwo	rkers Linear	0.09 Hours
Factors 0.1 h				
			0.88934 ISYS 061	4001 .88934200 - Svstem
A5C SUPPLIES	0000 NONE	C210S Facilities Mamt & Mainte	nance Linear	472.53 Dollars
<i>Factors</i> 523.47 d	1.015 FY00 Escalation			

Line Item 3 - Preventive maintenance

0.88934 [SYS 061400] .88934200 - System

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster

maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 82 preventative maintenance work actions are expected.

Data Source - Maintenance Management System and P&I Reporting System CPRs and Spending variance reports for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$112.28 average

Unit Adjustment factor - FY99 is used as a base year. FY00 thru 05 are expectred to require the same level of effort as FY99

Revised number of work orders -None

Basis for adjustment -None

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50%

Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

s		Cost Element		Skill		Department	Curve	Ouantity	Units
Ĺ	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	127.03	Hours
	Factors	142.84 h							
_							0.88934 [SYS 06140	01.88934200 - 9	System
	750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	95.28	Hours
	Factors	107.13 h							
_							0.88934 [SYS 06140	01.88934200 - 3	3vstem
	750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	14.54	Hours
i	Factors	16.35 h							
							0.88934 [SYS 06140	01.88934200 - 3	3vstem

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl 1EFB

		Daseille Cost at	iu Dasis	OI Estimate	Activity Filter *		Starts In FY *
751 OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	3	Linear	6.35 Hours
Factors 7.14 h							
).88934 [SYS 0614	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	3	Linear	4.77 Hours
Factors 5.36 h							
					C	0.88934 [SYS 0614	001 .88934200 - System
751 OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	3	Linear	0.73 Hours
Factors 0.82 h							
					C	0.88934 [SYS 0614	001 .88934200 - System
A5C SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenand	ce	Linear	942.20 Dollars
Factors 1043.78 d		1.015 FY00 Escalation					

101010

to the angle of the section of the s

0.88934 [SYS 061400] .88934200 - System

Line Item 3a - Preventive maintenance BOE Preventive Maintena

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster

maintenance performance, backlog, and projected work load. These Items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 144 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$95.35 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 74% of the FY 99 budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficency return.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Cont Elamont

Maint. Mech 37.50% Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

S Cost Element	Skill	<u>Department</u>	Curve	Ouantity Units
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	178.56 Hours
Factors 200.78 h				
			0.88934 [SYS 06140	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers	Linear	133.93 Hours
Factors 150.59 h				
			0.88934 [SYS 06140	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTER	RS KE10H Indust/Site Srvs Steelworkers	Linear	20.44 Hours
Factors 22.98 h				
			0.88934 [SYS 06140	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	8.93 Hours
Factors 10.04 h				
			0.88934 [SYS 06140	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers	Linear	6.70 Hours
Factors 7.53 h				
			0.88934 [SYS 06140	001 .88934200 - Svstem

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Rocky Flats Closure Project Resoling Cost and Resis of Estimate

Baseline Devl Proiect 1EFB WBS Filter

			Dascille Cost al	ia Basis	Activity Filter	*	Starts In FY *
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.02 Hours
Factors	1.15 h	-	•		•	•	•
						0.88934 [SYS 06140	01 .88934200 - Svstem
A5C	SUPPLIES	0000	NONE	C210S	Facilities Momt & Maintenance	Linear	1.324.38 Dollars

Factors Line Item 3b - Preventive maintenance

1467.16 d

0.88934 [SYS 061400] .88934200 - System

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 216 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98 Item Desc - Fiscal Year Preventive Maintenance Breakdown of Data: Item - Preventive maintenance Units - Work Packages Unit Cost - \$75.11 average in this cluster Unit Adjustment factor - .9783 Revised Unit Cost - 216 for this cluster Basis for adjustment - Meet KH Targets

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50% Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

1.015 -- FY00 Escalation --

3	Cost Element		Skill	Department	Curve	Ouantity Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	237.76 Hours
Factors	267.34 h					
					0.88934 [SYS 061400	01 .88934200 - Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear	178.32 Hours
Factors	200.51 h					
					0.88934 [SYS 061400	1 .88934200 - Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	27.20 Hours
Factors	30.59 h					
			_		0.88934 [SYS 061400	1 .88934200 - Svstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	11.89 Hours
Factors	13.37 h					
					0.88934 [SYS 061400	1 .88934200 - Svstem
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear	8.92 Hours
Factors	10.03 h					
					0.88934 [SYS 061400	1 .88934200 - Svstem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	1.36 Hours
Factors	1.53 h					
_					0.88934 [SYS 061400	1 .88934200 - Svstem
A5C	SUPPLIES	0000	NONE	C210S Facilities Momt & Maintenance	Linear	244.49 Dollars
Factors	1.015 FY00 Escalation		270.85 d			
					0.88934 ISYS 061400	1 .88934200 - Svstem

BOE

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

C210S Facilities Momt & Maintenance

Baseline Devl Proiect WBS Filter 1EFB

Starts In FY 9.03 Dollars Linear

0000 NONE Factors 10 Dollars 1.015 -- FY00 Escalation --

Line Item 3c - Preventive maintenance

A5T TAXES

0.88934 [SYS 061400] .88934200 - System

0.88934 [SYS 061400] .88934200 - System

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

Approximately 18 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$30.28 average in this cluster

Adjustment factor - FY99 is used as a base year. FY00 thru 05 are equal to FY99 scope

Revised number of work orders - No Change

Basis for adjustment - Directed targets.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50% Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

s		Cost Element		Skill		Department	Curve	Ouantity Units
L	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	7.08 Hours
F	actors	7.96 h						
							0.88934 [SYS 06140	01 .88934200 - Svstem
	750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	5.31 Hours
F	actors	5.97 h						
							0.88934 [SYS 06140	01 .88934200 - Svstem
	750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.81 Hours
F	actors	0.91 h						
_							0.88934 [SYS 06140	01 .88934200 - Svstem
	751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.36 Hours
F	actors	0.4 h						
_							0.88934 [SYS 06140	01 .88934200 - Svstem
	751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.27 Hours
F	actors	0.3 h						
							0.88934 ISYS 06140	01 .88934200 - System
	751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.04 Hours
F	actors	0.05 h						
							0.88934 [SYS 06140	01 .88934200 - System
	A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	52.50 Dollars
F	actors	58.16 d		1.015 FY00 Escalation				

Line Item SYS - Contingency And Escalation

BOE

Baseline Devl Proiect **Rocky Flats Closure Project** 1EFB WBS Filter

1EFB0395 Activity ID: **Baseline Cost and Basis of Estimate** Activity Filter Skill Resources Cost Element Department Curve

ZDEPT No Department 0000 NONE CON CONTINGENCY Linear 7.594.02 Dollars 7594.02 Dollars 0000 NONE ZDEPT No Department 5.010.14 Dollars ESC ESCALATION Linear

5010.14 Dollars Factors

Activity ID: 1EFB0400 Description: Security Bldgs Cluster Landlord Functions, FY02 Cost Risk 2 Schedule Risk

Line Item	Description	Quantity	Units	BOE	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
		ļ		Type	Hours/Unit	1 otal	1 otal	Cost	& Escalation	Cost		
1	Corrective maintenance	1.00	each	HC	1.475	1.475	31.773	8.480	0	40.253	11.216	51.469
1a	Corrective maintenance	0.74	each	HC	2.073	1.534	33.079	8.820	0	41.899	11.677	53.576
1b	Corrective maintenance	0.98	each	HC	2.760	2.701	58.242	2.230	0	60.473	20.560	81.032
1c	Corrective maintenance	1.00	each	HC	82	82	1.771	473	0	2.243	625	2.868
3	Preventive maintenance	1.00	each	HC	249	249	5.450	942	0	6.392	1.924	8.316
3a	Preventive maintenance	0.74	each	HC	350	259	5.669	980	0	6.649	2.001	8.650
3b	Preventive maintenance	0.98	each	HC	465	455	9.979	248	0	10.227	3.523	13.750
3c	Preventive maintenance	1.00	each	HC	14	14	304	52	0	356	107	464
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	32.816	32.816	0	32.816
	Tot	al for Activi	ty 1EFB0400):		6.768	146.268	22.226	32.816	201.309	51.632	252.942

Line Item 1 - Corrective maintenance

1EFB10

BOE

WBS No:

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 116 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$488.44 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 thru 05 are expectred to require the same level of effort as FY99

Revised number of work orders -None

Basis for adjustment -None

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

30.77% (includes Linemen) Electrician Maint. Mech 13.85%

Painter 10 77% Pipefitter 23 08%

Metal Worker 4.62%

116.06 h

Factors

Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

S	Cost Element Skill		Department	Curve	Quantity	Units			
	750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	63.52 H	Hours	
	Factors	71.42 h							

0.88934 [SYS 061400] .88934200 - System 103.22 Hours 750 STRAIGHT TIME BASE C010 CARPENTERS KE10H Indust/Site Srvs Steelworkers Linear

0.88934 [SYS 061400] .88934200 - System

Starts In FY

Hnit

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Ba
WBS Filter 1E
Activity Filter *

Baseline Devl 1EFB

C010 CARPENTERS C020 ELECTRICIANS C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworke KE10H Indust/Site Srvs Steelworke	0.88934 ISYS 061 ers Linear	Starts In FY * 95.28 Hours 4001 .88934200 - System 131.44 Hours
	KE10H Indust/Site Srvs Steelworke	0.88934 ISYS 061 ers Linear	
		ers Linear	
			131.44IFIOUIS
C020 ELECTRICIANS	KE10H Indust/Site Stys Steelworks	0.00004 10000	
C020 ELECTRICIANS	KE10H Indust/Site Style Steelworks	0.88934 ISYS 061	4001 .88934200 - Svstem
	TIL TOTAL HINGUS VOILE OF VS OLECHWOLKE	ers Linear	153.48 Hours
		0.00004 FCVC 004	4001 00004000 0
C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworke		4001 .88934200 - System 137.63 Hours
TOVES TELESTITION WAS	TE OF HIMMONORO STAN SHOWN		107.001110010
			4001 .88934200 - System
C040 MAINTENANCE MACHINIST (inc	Exp KE10H Indust/Site Srvs Steelworke	ers Linear	63.52 Hours
		0.808.4 [575.061	4001 99034300 Systom
C040 MAINTENANCE MACHINIST (inc	Exp KE10H Indust/Site Srvs Steelworke		52.93 Hours
			4001 .88934200 - Svstem
I C040 IMAINTENANCE MACHINIST (inc	Exp KE10H Indust/Site Srvs Steelworke	ers Linear	10.58 Hours
		0.88934 [SYS.061	4001 88934200 - System
C070 PAINTERS	KE10H Indust/Site Srvs Steelworke		63.52 Hours
OOTO DANITEDO	1454011 1 1407 0 0 1 1		400] .88934200 - System
CU/U IPAINTERS	KETOH Indust/Site Srvs Steelworke	ers Linear	108.50 Hours
		0.88934 [SYS 061	400] .88934200 - System
C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworke		34.40 Hours
CORO DI LIMBERS AND DIDEETTERS	KE10H Indust/Site Says Steelworks		400 .88934200 - System 218.81 Hours
1 C000 IPLUIVIBERS AND PIPERITIERS	RETURN IIII III III III III III III III III	ers Linear	210.011HUUIS
		0.88934 [SYS 061	4001 .88934200 - Svstem
C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworke	ers Linear	42.34 Hours
		0.00024 15V5.064	4001 00024200 Custom
C090 STRUCTURAL AND METAL WO	RKE KE10H Indust/Site Srvs Steelworke	0.88934 ISTS 061	93.51 Hours
1 0000 10111001010101101101101111011110111101111	THE TOTAL MINIMONOR OF TO STORY		
			4001 .88934200 - System
R070 WASTE TREATMENT OPERATO	OR A KE10H Indust/Site Srvs Steelworke	ers Linear	31.76 Hours
		0.88934 [SVS 061	4001 88034200 - System
C010 CARPENTERS	KE10H Indust/Site Srvs Steelworke		4.77 Hours
			4001 .88934200 - System
I C010 ICARPENTERS	KE10H Indust/Site Srvs Steelworke	ers Linear	5.16 Hours
		0.88934 ISYS 061	4001 88934200 - System
C010 CARPENTERS	KE10H Indust/Site Srvs Steelworke		3.17 Hours
	C040 MAINTENANCE MACHINIST (inc C040 MAINTENANCE MACHINIST (inc C040 MAINTENANCE MACHINIST (inc C070 PAINTERS C070 PAINTERS C080 PLUMBERS AND PIPEFITTERS C080 PLUMBERS AND PIPEFITTERS C080 PLUMBERS AND PIPEFITTERS C090 STRUCTURAL AND METAL WO R070 WASTE TREATMENT OPERATO C010 CARPENTERS	C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworker) C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworker) C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworker) C070 PAINTERS KE10H Indust/Site Srvs Steelworker C070 PAINTERS KE10H Indust/Site Srvs Steelworker C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworker C090 STRUCTURAL AND METAL WORKE KE10H Indust/Site Srvs Steelworker R070 WASTE TREATMENT OPERATOR A KE10H Indust/Site Srvs Steelworker C010 CARPENTERS KE10H Indust/Site Srvs Steelworker KE10H Indust/Site Srvs Steelworker KE10H Indust/Site Srvs Steelworker KE10H Indust/Site Srvs Steelworker	0.88934 ISYS 061

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter

Baseline Devl 1EFB

	Daseille Cost	Activity Filte	er * Starts In FY *
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 6.88 Hours
Factors 7.74 h			
			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 6.57 Hours
Factors 7.39 h			0.00024 [CVC.004.400] 0.0024200 Cvcstom
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400] .88934200 - System Linear 7.68 Hours
Factors 8.63 h	1 CO20 ILLECTRICIANS	RETOTI IIIIdusi/Site Sivs Steelworkers	Lineal 7.00ii louis
1 40.075			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Ex	xp KE10H Indust/Site Srvs Steelworkers	Linear 0.53 Hours
Factors 0.6 h			
			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Ex	b KE10H Indust/Site Srvs Steelworkers	Linear 3.17 Hours
Factors 3.57 h			
OVEDTIME DAGE & DDE			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE. Factors 2.98 h	C040 MAINTENANCE MACHINIST (incl Ex	D KE10H Indust/Site Srvs Steelworkers	Linear 2.65 Hours
Factors 2.98 h			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear 3.17 Hours
Factors 3.57 h	T OUTO II MINTERO	TRETOTT IIII GUSVOILE SIVS SICE IWOINETS	Linear J. 17 in loans
			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear 5.42 Hours
Factors 6.1 h			
			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear 2.12 Hours
Factors 2.38 h			
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400] .88934200 - System Linear 10.94 Hours
Factors 12.3 h	C080 PLUMBERS AND PIPEFITTERS	KETOH IIIIdusi/Sile Sivs Sleeiworkers	Linear 10.94 Hours
raciors 12.5 II			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear 1.72 Hours
Factors 1.93 h		TE TOTAL THIS GOVERNOR STATE STATE OF THE TOTAL STA	
			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C090 STRUCTURAL AND METAL WORKE	KE10H Indust/Site Srvs Steelworkers	Linear 4.68 Hours
Factors 5.26 h			
			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	R070 WASTE TREATMENT OPERATOR A	A KE10H Indust/Site Srvs Steelworkers	Linear 1.59 Hours
Factors 1.79 h			0.00004 100/0.0044001 00004000 0
A5C SUPPLIES	0000 NONE	C210S Facilities Momt & Maintenance	0.88934 [SYS 0614001 .88934200 - System Linear 8.479.82 Dollars
Factors 9394.03 d	1.015 FY00 Escalation	CZ 103 Tracilities Midmit & Maintenance	Linear 6.479.82ID0llars
1 aciois 3334.03 u	1.013 1 100 L5cdidli011		0.00004 100/0.004 1001 0000 1000 0

Line Item 1a - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

Approximately 123 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98
Item Desc - Fiscal Year Corrective Maintenance

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0.88934 [SYS 061400] .88934200 - System

Rockv Flats Closure Project

Baseline Cost and Basis of Estimate

Project

WBS Filter

Activity Filter

Breakdown of Data:

1EFB10

1EFB0400

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$686.56 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 74% of the FY 99

budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficency return.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 32.31% (includes Linemen)

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

WBS No:

Activity ID:

es		Co	ost Element		Skill		Department	Cur	rve	Ouantity	Units
L	750	STRAIGHT	TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Line	ear	133.93	Hours
	Factors	150.59	h								
-								0.88934	[SYS 061400]	1 .88934200 - \$	System
L	750	STRAIGHT	TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Line	ear	89.28	Hours
	Factors	100.39	h								
-								0.88934	ISYS 061400	1.88934200 - \$	System
	750	STRAIGHT	TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Line	ear	145.09	Hours
	Factors	163.14	h								
-								0.88934	ISYS 061400	1.88934200 - \$	System
	750	STRAIGHT	TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Line	ear	193.44	Hours
	Factors	217.51	h								
-								0.88934	ISYS 061400	1.88934200 - \$	System
	750	STRAIGHT	TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Line	ear	44.64	Hours
	Factors	50.2	h								
-								0.88934	ISYS 061400	1.88934200 - \$	System
	750	STRAIGHT	TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Line	ear	184.75	Hours
	Factors	207.74	h								
-								0.88934	ISYS 061400	1.88934200 - \$	System
	750	STRAIGHT	TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Line	ear	215.74	Hours
	Factors	242.58	h								
-								0.88934	ISYS 061400	1.88934200 - \$	System
L	750	STRAIGHT	TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Line	ear	14.88	Hours
	Factors	16.73	h								
								0.88934	ISYS 061400	1 .88934200 - \$	System
	750	STRAIGHT	TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Line	ear	89.28	Hours
	Factors	100.39	h								
								0.88934	[SYS 061400]		
Į	750	STRAIGHT	TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Line	ear	74.40	Hours
	Factors	83.66	h								
								0.88934	[SYS 061400]		
Į	750	STRAIGHT	TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Line	ear	89.28	Hours
	Factors	100.39	h								
								0.88934	[SYS 061400]	1 .88934200 - 5	System
	750	STRAIGHT	TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Line	ear	152.51	Hours
	Factors	171.49	h								
_								0.88934	ISYS 061400	1 .88934200 - \$	System

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Baseline Devl

Starts In FY *

1EFB

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filte

Baseline Devl 1EFB *

	Daseille Cost a	Activity 1	Filter * Starts In FY *
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear 59.52 Hours
Factors 66.93 h			
			0.88934 [SYS 061400] .88934200 - Svster
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear 48.34 Hours
Factors 54.36 h			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear 307.57 Hours
Factors 345.84 h			0.00004 [0]/0.004400] 00004000 0
750 STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL WORKE	KE10H Indust/Site Stys Steelworkers	0.88934 [SYS 0614001 .88934200 - Syster Linear 131.44 Hours
Factors 147.79 h	1 0000 IOTHOOTOTAL AIRD WETAE WORKE	TRETOTT IIIIdds/Oile Oilys OleelWorkers	Elitedi 101.44ii louis
11110			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 6.70 Hours
Cactors 7.53 h			0.0000 / 10/10.00 / 100/1 0000 / 100
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400] .88934200 - Svster Linear 4.46 Hour
Factors 5.02 h	I SS IS IS IN EN EN		
			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 7.26 Hours
Factors 8.16 h			
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	I/E4011 Indust/Oite Once Otenhander	0.88934
factors 3.35 h	CU20 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 2.98 Hour
actors 3.33 II			0.88934 [SYS 061400] .88934200 - Syste
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 9.68 Hour
Factors 10.88 h			
			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 10.79 Hour
factors 12.13 h			0.88934 [SYS 061400] .88934200 - Syste
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 9.24 Hour
Cactors 10.39 h			
			0.88934
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exc	KE10H Indust/Site Srvs Steelworkers	Linear 3.72 Hour
Cactors 4.18 h			
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exc	VE10H Indust/Site Strue Steelworkers	0.88934 [SYS 061400] .88934200 - Svste Linear 0.75 Hour
Factors 0.84 h	1 C040 IMAINTENANCE MACHINIST UIICI EXL	TRETOR IIIIdus//Site SIVs Steetworkers	Lilleal 0.75inoul
0.01			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exc	KE10H Indust/Site Srvs Steelworkers	Linear 4.46 Hour
Factors 5.02 h			
		T.,_,,,,	0.88934 [SYS 061400] .88934200 - Syste
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear 7.62 Hour
actors 8.57 h			0.00024 [CVC.064.400] 0.0024200 Custo
	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	0.88934
751 OVERTIME BASE & DDE		TIVE TOTAL HITIUUSI/OILE OI VS OLEEHWOLKEIS	Lineai 4.40inoui
751 OVERTIME BASE & PRE.	T SOLO II / III / III /		
751 OVERTIME BASE & PRE. Cactors 5.02 h			0.88934 ISYS 0614001,88934200 - Syste
	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 ISYS 0614001.88934200 - Syste Linear 2.42 Hour

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Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl 1EFB

		Bucciiiio Goot ai	u Bucic C: 201.	Activity Filter	*	Starts In FY *
751 OVERTIME BASE & PRE.	C080 PLUM	BERS AND PIPEFITTERS	KE10H Indust/S	ite Srvs Steelworkers	Linear	15.38 Hours
Factors 17.29 h						
					0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C090 STRU	CTURAL AND METAL WORKE	KE10H Indust/S	ite Srvs Steelworkers	Linear	6.57 Hours
Factors 7.39 h						
					0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	R070 WAST	E TREATMENT OPERATOR A	KE10H Indust/S	ite Srvs Steelworkers	Linear	2.23 Hours
Factors 2.51 h						
					0.88934 [SYS 06140	01 .88934200 - Svstem
A5C SUPPLIES	0000 NONE		C210S Facilitie	s Mamt & Maintenance	Linear	11.919.40 Dollars
Factors 13204.4 d	1.01	5 FY00 Escalation				

Line Item 1b - Corrective maintenance

0.88934 [SYS 061400] .88934200 - System

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 290 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98 Item Desc - Ad-hoc querry on MMS data, P&I 002a and spending variance reports. Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$327.65 average for this cluster

Unit Adjustment factor - .9783

Revised Unit Cost - 290 for this cluster Basis for adjustment - Meet KH Targets

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 32.31% (includes Linemen)

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

s	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	118.88	Hours
Factors	133.67 h							
_						0.88934 [SYS 061400	01 .88934200 - 9	System
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	193.18	Hours
Factors	217.22 h							
						0.88934 [SYS 061400	0] .88934200 - \$	System
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	178.32	Hours
Factors	200.51 h							
						0.88934 [SYS 061400	0] .88934200 - \$	System
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	59.44	Hours
Factors	66.84 h							
	,					0.88934 [SYS 061400	01 .88934200 - \$	System

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filte

Baseline Devl 1EFB

	Daseline (Cost and Basis of Estimate Activity Fig.	ter * Starts In FY *
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 287.26 Hours
Factors 323 h			
			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 257.57 Hours
Factors 289.62 h			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	U.00934 13 13 00 14001 .88934200 - System Linear 246.00 Hours
Factors 276.61 h	I OULO ILLEO II WOM WITE	TALLET THE MAN DIED STATE STAT	
			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (i	ncl Exp KE10H Indust/Site Srvs Steelworkers	Linear 118.88 Hours
Factors 133.67 h			
TEO OTDAIGUIT TIME DAGE	OO 40 MAINTENANOE MAQUINIOT (15 KE1011 I 1 (10); 0 0; 1 1	0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE Factors 111.39 h	I C040 IMAINTENANCE MACHINIST (I	ncl Exp KE10H Indust/Site Srvs Steelworkers	Linear 99.06 Hours
raciors 111.59 II			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (i	ncl Exp KE10H Indust/Site Srvs Steelworkers	Linear 20.29 Hours
Factors 22.82 h			
			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear 118.88 Hours
Factors 133.67 h			
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400] .88934200 - System Linear 203.07 Hours
Factors 228.34 h	CU/U PAINTERS	RETURN IIII IIII III III III III III III III	Linear 203.07 Hours
Puctors 220.04 II			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTER	S KE10H Indust/Site Srvs Steelworkers	Linear 79.25 Hours
Factors 89.11 h			
			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTER	S KE10H Indust/Site Srvs Steelworkers	Linear 64.38 Hours
Factors 72.39 h			0.00004 [0]/0.0044001 00004000 0
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTER	S KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400] .88934200 - System Linear 409.53 Hours
Factors 460.49 h	1 C080 IFLUIVIBERS AND FIFEFITTEN	S RETURN IIIIdus//Site Sivs Steelworkers	Lineal 409.55inouis
1 400.43			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL W	/ORKE KE10H Indust/Site Srvs Steelworkers	Linear 175.01 Hours
Factors 196.79 h			
			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 9.66lHours
Factors 10.86 h			0.00004 [0]/0.0044001 00004000 0
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	0.88934
Factors 6.68 h	I COTO ICARPENTERS	RETURN IIIIdust/Site Sivs Steetworkers	Lineal 5.94inouis
0.00 II			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 8.92 Hours
Factors 10.03 h			
			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 2.97 Hours
Factors 3.34 h			
754 OVERTIME DAGE & DDE	0000 ELECTRICIANO	WE4011 In-th-ref/0ite 0	0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 12.88lHours
Factors 14.48 h			0.88934 [SYS 061400] .88934200 - System
			0.00304 1010 0014001.00304200 - 3ystem

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl 1EFB

	Daseille Cost	Activity	Filter *	Starts In FY *
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	12.30 Hours
Factors 13.83 h				
			0.88934 [SYS 06140	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	14.36 Hours
Factors 16.15 h				
			0.88934 ISYS 06140	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl E	xp KE10H Indust/Site Srvs Steelworkers	Linear	4.95 Hours
Factors 5.57 h				
	1		0.88934 ISYS 06140	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl E	xp KE10H Indust/Site Srvs Steelworkers	Linear	0.99 Hours
Factors 1.11 h				
				001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl E	xp KE10H Indust/Site Srvs Steelworkers	Linear	5.94 Hours
Factors 6.68 h				
	T I			001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	5.94 Hours
Factors 6.68 h				
	T I			001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	10.16 Hours
Factors 11.42 h				
TEAL OVERTIME DAGE & DDE	OCCO DI UNDEDO AND DIDESTEDO	1/54011 1 1 1/0% 0 00 1 1		001 .88934200 - Svstem 20.47 Hours
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	20.47 Hours
Factors 23.02 h			0.00004 [0.000.00444	201 00004000 0
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 ISYS 06140 Linear	00] .88934200 - System 3.22 Hours
	C080 PLUMBERS AND PIPEFITTERS	KETOH IIIdust/Site Sivs Steetworkers	Linear	3.22 H0uis
Factors 3.62 h			0.88034 [676.06140	00] .88934200 - System
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	U.88934 1513 06140	3.97 Hours
Factors 4.46 h	C000 FEOMBERS AND FIFEITITERS	RETUIT IIIdust/Site Sivs Steetworkers	Lilleai	3.37 Ji 10u15
<i>ruciors</i> 4.40 II			0.88834 [575.06140	00] .88934200 - System
751 OVERTIME BASE & PRE.	C090 STRUCTURAL AND METAL WORK	E KE10H Indust/Site Srvs Steelworkers	Linear	8.75 Hours
Factors 9.84 h	1 COSO ISTRUCTIONAL AND METAL WORK	L NETOTT IIII dustroite oi vs oteetworkers	Lilleai	0.731110013
1 40.075 3.04 11			0.88934 [SVS.06140	001 .88934200 - Svstem
A5C SUPPLIES	0000 NONE	C210S Facilities Momt & Maintenance	Linear	2.200.39 Dollars
Factors 1.015 FY00 Escalation	2437.61 d	- 02100 II dollidos ividirit a ividiritaridide	Linear	2.200.001D01la13
1.010 1 100 Escalation	2707.01 G		0.88934 [SYS.06140	001 .88934200 - System
A5T TAXES	0000 NONE	C210S Facilities Momt & Maintenance	Linear	79.44 Dollars
Factors 1.015 FY00 Escalation	88 Dollars	- CETTO II MONINGO FRANTI O FRANTIGITO	Enioni	, ro. i liboliais
1.010 1100 Localation	oo Dollaro			

Line Item 1c - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 16 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$209.25 average for this cluster

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0.88934 [SYS 061400] .88934200 - System

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Baseline Devl WBS Filter 1EFB Activity Filter *

Starts In FY *

Adjustment factor - FY99 is used as a base year. FY00 thru 05 are equal to FY99 scope Revised number of work orders - No Change

Basis for adjustment - Directed targets.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 30.77% (includes Linemen)

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

s		Ca	ost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT	TIME BASE	C010 CA	RPENTERS	KE10H	Indust/Site Srvs Steelworke	rs	Linear	5.75	Hours
	Factors	6.47	h								
F				r r			Т		0.88934 [SYS 061400		
L	750		TIME BASE	C010 CA	RPENTERS	KE10H	Indust/Site Srvs Steelworke	rs	Linear	5.31	Hours
	Factors	5.97	h						0.88934 [SYS 061400)1 .88934200 - \$	Svstem
	750	STRAIGHT	TIME BASE	C010 CA	RPENTERS	KE10H	Indust/Site Srvs Steelworke	rs	Linear	3.54	Hours
	Factors	3.98	h								
Г							1		0.88934 [SYS 061400		
L	750		TIME BASE	C020 ELI	ECTRICIANS	KE10H	Indust/Site Srvs Steelworke	rs	Linear	7.33	Hours
	Factors	8.24	h						0.88934 [SYS 061400	1 88934200 - 9	System
	750	STRAIGHT	TIME BASE	C020 ELI	ECTRICIANS	KE10H	Indust/Site Srvs Steelworke	rs	Linear		Hours
	Factors	9.62	h								
_									0.88934 [SYS 061400	0] .88934200 - \$	System
	750	STRAIGHT	TIME BASE	C020 ELI	ECTRICIANS	KE10H	Indust/Site Srvs Steelworke	rs	Linear	7.67	Hours
	Factors	8.62	h						0.88934 [SYS 061400	N 00024200 G	System
ſ	750	STRAIGHT	TIME BASE	CO40 MA	AINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Save Steelworke	re	U.00934 1313 001400 Linear		Hours
L	Factors	3.98	h	1 CO40 IIVIA	MINITENANCE MACHINIST THE EXD	IXE IVII	midds/Oile Oivs SteelWorke	13	Lilleai	5.54	illouis
	1 uciors	0.00							0.88934 [SYS 061400	1 88934200 - 9	System
	750	STRAIGHT	TIME BASE	C040 MA	AINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworke	rs	Linear		Hours
	Factors	3.32	h								
-									0.88934 [SYS 061400	1 .88934200 - \$	System
	750	STRAIGHT	TIME BASE	C040 MA	AINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworke	rs	Linear	0.59	Hours
	Factors	0.66	h								
ΙĒ				r r			ı		0.88934 [SYS 061400		
L	750		TIME BASE	C070 PA	INTERS	KE10H	Indust/Site Srvs Steelworke	rs	Linear	6.05	Hours
	Factors	6.8	h								
Г							I		0.88934 [SYS 061400		
L			TIME BASE	C070 PA	INTERS	KE10H	Indust/Site Srvs Steelworke	rs	Linear	3.54	Hours
	Factors	3.98	h								
Г		0.70				1/5 / 01 /	/0/- 0 0		0.88934 [SYS 061400		
L			TIME BASE	C080 PLI	UMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworke	rs	Linear	1.92	Hours
	Factors	2.16	h						0.00004 [0)/0.004400	1 00004000	
ſ	750	CTDAICUIT	TIME BASE	C000 DI	UMBERS AND PIPEFITTERS	KE10U	Indust/Site Srvs Steelworke	ro	0.88934 [SYS 061400		System Hours
L	Factors	2.65	h	I CUBU IPLI	UIVIDERS AND PIPEFITIERS	NE IUI	IIIIuusi/Sile Sivs SleelW0fKe	15	Linear	2.36	HUUIS
	r actors	2.00	11						0.88934 [SYS 061400	1 .88934200 - 9	System
-									10.0001100		_ ,

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Ba
WBS Filter 1E
Activity Filter *

Baseline Devl 1EFB

1EFB0400	Baseline Cost a	nd Basis of Estimate	WBS Filter Activity Filter	1EFB *	Starts In FY *
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwork		Linear	12.19 Hours
Factors 13.71 h					
750 STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL WORKE	KE10H Indust/Site Says Steelwork	ore	0.88934 ISYS 0614 Linear	001 .88934200 - Svstem 5.21 Hours
Factors 5.86 h	1 COSO ISTINOCTONAL AND WILLTAE WORKE	TICTOTT IIII GUSVOILE SIVS SIEEIWOIN	CIS	Lilleal	J.211110013
					001 .88934200 - Svstem
750 STRAIGHT TIME BASE	R070 WASTE TREATMENT OPERATOR A	KE10H Indust/Site Srvs Steelwork	ers	Linear	1.77 Hours
Factors 1.99 h				0.88034 [SVS.0614	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelwork	ers	Linear	0.28 Hours
Factors 0.32 h					
		T.,=			001 .88934200 - Svstem
751 OVERTIME BASE & PRE. Factors 0.2 h	C010 CARPENTERS	KE10H Indust/Site Srvs Steelwork	ers	Linear	0.18 Hours
raciors 0.2 II				0.88934 [SYS 0614	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelwork	ers	Linear	0.27 Hours
Factors 0.3 h					
754 OVEDTIME DAGE & DDE	Occo ELECTRICIANO				001 .88934200 - System
751 OVERTIME BASE & PRE. Factors 0.48 h	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwork	ers	Linear	0.43 Hours
1 40015 0.40 11				0.88934 [SYS 0614	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwork	ers	Linear	0.38 Hours
Factors 0.43 h					
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwork	oro	0.88934 SYS 0614 Linear	00] .88934200 - System 0.36 Hours
Factors 0.41 h	CO20 ILLECTRICIANS	TRE TOTA IIII GUSU SILE SIVS SLEETWORK	.615	Lilleal	0.30 100 5
				0.88934 [SYS 0614	00] .88934200 - System
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelwork	ers	Linear	0.15 Hours
Factors 0.17 h				0.00004 [0000.004.4	001 00004000 - 0
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelwork	ers	0.88934 1515 0614 Linear	00] .88934200 - System 0.03 Hours
Factors 0.03 h					U.OOH IOUIO
					001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelwork	ers	Linear	0.18 Hours
Factors 0.2 h				0.88034 [SVS.0614	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelwork	ers	Linear	0.30 Hours
Factors 0.34 h					
		T.,			001 .88934200 - System
751 OVERTIME BASE & PRE. Factors 0.2 h	C070 PAINTERS	KE10H Indust/Site Srvs Steelwork	ers	Linear	0.18 Hours
raciors 0.2 II				0.88934 [SYS 0614	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwork	ers	Linear	0.12 Hours
Factors 0.13 h					
754 OVERTIME BACE & DDE	COOL DILIMPERO AND DIRECTTESS	KE4011 Indust/Cits Core Otal			001 .88934200 - Svstem
751 OVERTIME BASE & PRE. Factors 0.69 h	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwork	ers	Linear	0.61 Hours
0.00 11				0.88934 [SYS 0614	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwork	ers	Linear	0.10 Hours
Factors 0.11 h					001 0000 105 - 5
	<u>- </u>			U.88934 SYS 0614	00] .88934200 - System

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect E
WBS Filter 1

Baseline Devl 1EFB

		Baseline Cost ar	ia Basis	of Estimate Activity	ity Filter *	Starts In FY *
751 OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	0.26 Hours
Factors 0.29 h						
					0.88934 [SYS (0614001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	0.09 Hours
Factors 0.1 h						
					0.88934 [SYS (0614001 .88934200 - Svstem
A5C SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	472.53 Dollars
<i>Factors</i> 523.47 d		1.015 FY00 Escalation				

Line Item 3 - Preventive maintenance

0.88934 [SYS 061400] .88934200 - System

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

Approximately 82 preventative maintenance work actions are expected.

Data Source - Maintenance Management System and P&I Reporting System CPRs and Spending variance reports for FY98 Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Breakdown of Data.

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$112.28 average

Unit Adjustment factor - FY99 is used as a base year. FY00 thru 05 are expectred to require the same level of effort as FY99

Revised number of work orders -None

Basis for adjustment -None

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50%

Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Cost Element		Skill	Department	Curve	Ouantity Units
750 STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	127.03 Hours
Factors 142.84 h					
				0.88934 [SYS 06140	01 .88934200 - Svstem
750 STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear	95.28 Hours
Factors 107.13 h					
				0.88934 [SYS 06140	01 .88934200 - Svstem
750 STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	14.54 Hours
Factors 16.35 h					
				0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	6.35 Hours
Factors 7.14 h					
				0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear	4.77 Hours
Factors 5.36 h					
				0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	0.73 Hours
Factors 0.82 h					
				0.88934 [SYS 06140	01 .88934200 - Svstem

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filter

Baseline Devl 1EFB

Curve

0.88934 [SYS 061400] .88934200 - System

* Starts In FY *
Linear 942.20 Dollars

 A5C
 SUPPLIES
 0000
 NONE

 Factors
 1043.78 d
 1.015 -- FY00 Escalation -

Line Item 3a - Preventive maintenance

0.88934 [SYS 061400] .88934200 - System

Units

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

C210S Facilities Mgmt & Maintenance

Department

·Approximately 144 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$95.35 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 74% of the FY 99

budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficency return.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Cost Element

Maint. Mech 37.50%

Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	Cost Etement		Skili		Department	Curve	Quantity Unit
750 ST	RAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	178.56 Hours
Factors	200.78 h						
						0.88934 ISYS 06140	01 .88934200 - Svstem
750 STI	RAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	133.93 Hours
Factors	150.59 h						
						0.88934 [SYS 06140	01 .88934200 - Svstem
750 STI	RAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	20.44 Hours
Factors	22.98 h						
						0.88934 [SYS 06140	01 .88934200 - Svstem
751 OV	ERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	8.93 Hours
Factors	10.04 h						
						0.88934 [SYS 06140	01 .88934200 - Svstem
751 OV	'ERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	6.70 Hours
Factors	7.53 h						
						0.88934 [SYS 06140	01 .88934200 - Svstem
751 OV	'ERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.02 Hours
Factors	1.15 h						
						0.88934 [SYS 06140	01 .88934200 - System
A5C SU	PPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	1.324.38 Dollars
	1467.16 d		1.015 FY00 Escalation				

Line Item 3b - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

Proiect Baseline Devl WBS Filter 1EFB

Activity Filter

maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average

Curve

0.88934 [SYS 061400] .88934200 - System

Units

Approximately 216 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

1EFB10

1EFB0400

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$75.11 average in this cluster

Unit Adjustment factor - .9783

Revised Unit Cost - 216 for this cluster

Basis for adjustment - Meet KH Targets

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Cost Element

Maint. Mech 37.50% Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Skill

Resources

WBS No:

Activity ID:

750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	237.76 Hours
Factors	267.34 h						
						0.88934 [SYS 061400	01 .88934200 - Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	178.32 Hours
Factors	200.51 h						
						0.88934 [SYS 061400	01 .88934200 - Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	27.20 Hours
Factors	30.59 h						
			1			0.88934 [SYS 061400	01 .88934200 - Svstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	11.89 Hours
Factors	13.37 h						
			1			0.88934 [SYS 061400	01 .88934200 - Svstem
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	8.92 Hours
Factors	10.03 h						
			1			0.88934 [SYS 061400	01 .88934200 - Svstem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.36 Hours
Factors	1.53 h						
			1			0.88934 [SYS 061400	01 .88934200 - Svstem
A5C	SUPPLIES	0000	NONE	C210S	Facilities Momt & Maintenance	Linear	244.49 Dollars
Factors	1.015 FY00 Escalation		270.85 d				
						0.88934 [SYS 061400	01 .88934200 - Svstem
A5T	TAXES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	9.03 Dollars
Factors	1.015 FY00 Escalation		10 Dollars				

Department

Line Item 3c - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated,and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

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Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Activity Filter Baseline Devl 1EFB

Starts In FY

·Approximately 18 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$30.28 average in this cluster

Adjustment factor - FY99 is used as a base year. FY00 thru 05 are equal to FY99 scope

Revised number of work orders - No Change Basis for adjustment - Directed targets.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50% Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

3	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	7.08	Hours
Factors	7.96 h							
					T	0.88934 [SYS 06140	001 .88934200 -	Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	5.31	Hours
Factors	5.97 h							
					T	0.88934 [SYS 06140	001 .88934200 -	Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.81	Hours
Factors	0.91 h							
					T	0.88934 [SYS 06140	001 .88934200 -	Svstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.36	Hours
Factors	0.4 h							
					T	0.88934 [SYS 06140	001 .88934200 -	Svstem
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.27	Hours
Factors	0.3 h							
					T	0.88934 [SYS 06140	001 .88934200 -	Svstem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.04	Hours
Factors	0.05 h							
					T	0.88934 [SYS 06140	001 .88934200 -	Svstem
A5C	SUPPLIES	0000	NONE	C210S	Facilities Momt & Maintenance	Linear	52.50	Dollars
Factors	58.16 d		1.015 FY00 Escalation					
						0.88934 [SYS 06140	001 .88934200 -	System

Line Item SYS - Contingency And Escalation

BOE

Resources

es		Cost Element		Skill		Department	Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	22.529.21	Dollars
	Factors	22529.2 Dollars							
ĺ	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	10.286.80	Dollars

10286.8 Dollars

Activity ID: 1EFE	Activity ID: 1EFB0405 Description: Security Bldgs Cluster Landlord Functions, FY03 Cost Risk 2 Schedule Risk 1											
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
1 Corrective maintenance		1.00	each	НС	1.475	1.475	31.773	8.480	0	40.253	10.994	51.247
4 -	C	0.74	1-	110	0.070	4 504	00.070	0.000	^	44 000	44 445	50.044

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl 1EFB

		Базс	Dascille Cost and Dasis of Estimate					Activity Filter *			Starts In FY *		
1c	Corrective maintenance	1.00 each	HC	82	82	1.771	473	0	2.243	613	2.856		
3	Preventive maintenance	1.00 each	HC	249	249	5.450	942	0	6.392	1.886	8.278		
3a	Preventive maintenance	0.74 each	HC	350	259	5.669	980	0	6.649	1.962	8.611		
3c	Preventive maintenance	1.00 each	HC	14	14	304	52	0	356	105	462		
SYS	Contingency And Escalation	1.00 ea	EE	0	0	0	0	34.513	34.513	0	34.513		
		Total for Activity 1EFB0405:					19.747	34.513	132.306	27.004	159.310		

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 116 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$488.44 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 thru 05 are expectred to require the same level of effort as FY99

Revised number of work orders -None

Basis for adjustment -None

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 30.77% (includes Linemen)

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

S Cost Element	Skill	Department	Curve	Quantity Units
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	103.22 Hours
Factors 116.06 h	1 COTO ICARFENTERS	INCTOIT IIIIdusVoite SIVS SteelWorkers	Lilleal	103.221110015
<i>Factors</i> 110:00 II			0.88034 [676.0614	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	0.86934 1313 0014 Linear	63.52 Hours
Factors 71.42 h	1 COTO ICARFENTERS	INCTOIT IIIIdusVoite SIVS SteelWorkers	Lilleal	03.321110018
racions 71.42 II			0.88934 ISVS 0614	001 .88934200 - System
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	95.28 Hours
Factors 107.13 h				_
			0.88934 [SYS 0614	00] .88934200 - System
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	131.44 Hours
<i>Factors</i> 147.79 h				
			0.88934 [SYS 0614	00] .88934200 - System
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	153.48 Hours
Factors 172.58 h				
			0.88934 [SYS 0614	00] .88934200 - System
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	137.63 Hours
Factors 154.75 h				
			0.88934 [SYS 0614	001 .88934200 - Svstem

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filt

Baseline Devl 1EFB

	Daseille Cost at	nd Basis of Estimate Activity F	"ilter * Starts In FY *
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp		Linear 10.58 Hour
Factors 11.9 h			
1			0.88934 [SYS 061400] .88934200 - Syste
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear 52.93 Hour
Factors 59.52 h			
		T	0.88934 [SYS 061400] .88934200 - Syste
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H IIndust/Site Srvs Steelworkers	Linear 63.52lHour
Factors 71.42 h			0.00024 [CVC.004.001.00024200.000.00
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400] .88934200 - Svste Linear 108.50 Hour
Factors 122 h	1 COTO IFAINTENS	TAL TOTT IIII GUSUSILE SIVS SLEETWOIKETS	Lineal 100.50li loui
raciors 122 II			0.88934 [SYS 061400] .88934200 - Syste
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear 63.52lHour
Factors 71.42 h			
			0.88934 [SYS 061400] .88934200 - Syste
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear 34.40 Hour
Factors 38.68 h			
			0.88934 [SYS 061400] .88934200 - Syste
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear 218.81 Hour
Factors 246.04 h			
750 OTDAIGUT TIME DAGE	OCCO DI LIMPEDO AMB DIDEFITTEDO	1/5/011 1 1 1/6% 0 01 1 1	0.88934 [SYS 061400] .88934200 - Syste
750 STRAIGHT TIME BASE Factors 47.61 h	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear 42.34 Hour
Factors 47.61 h			0.88934 [SYS 061400] .88934200 - Syste
750 STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL WORKE	KE10H Indust/Site Says Steelworkers	Linear 93.51 Hour
Factors 105.15 h	1 COSO ISTROCTORAL AND WETAL WORKE	INC 1011 Illiausyolte olvs oteelworkers	Eirieai 33.3 iji loui
100.10			0.88934 [SYS 061400] .88934200 - Syste
750 STRAIGHT TIME BASE	R070 WASTE TREATMENT OPERATOR A	KE10H Indust/Site Srvs Steelworkers	Linear 31.76 Hour
Factors 35.71 h			
			0.88934 [SYS 061400] .88934200 - Syste
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 5.16 Hour
Factors 5.8 h			
		T	0.88934 [SYS 061400] .88934200 - Syste
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 4.77 Hour
Factors 5.36 h			0.00004 100/0.0044001 00004000 0
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400] .88934200 - Svste Linear 3.17 Hour
Factors 3.57 h	I CUIU ICARPENTERS	THE FOLL HINDRENOISE SIVE STEERMORKERS	Linear 3.17IHour
raciois 3.31 II			0.88934 [SYS 061400] .88934200 - Syste
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 7.68 Hour
Factors 8.63 h		THE COLUMN COLOR OF THE COLOR O	Enrodi 7.00m Iddi
			0.88934 [SYS 061400] .88934200 - Syste
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 6.57 Hour
Factors 7.39 h			
			0.88934 [SYS 0614001.88934200 - Syste
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 6.88 Hour
Factors 7.74 h			
		T.,	0.88934 [SYS 061400] .88934200 - Syste
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H IIndust/Site Srvs Steelworkers	Linear 0.53 Hour
Factors 0.6 h			0.00004 [0.00.001400] 00004000 0
			0.88934 [SYS 061400] .88934200 - Syste

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl 1EFB

			baseline Cost ar	iu Dasis	Activ	vity Filter *	Starts In FY *
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	3.17 Hours
Factors	3.57 h						
		1			1	0.88934 [SYS 06140	01 .88934200 - Svstem
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	2.65 Hours
Factors	2.98 h						
	T			I		0.88934 [SYS 06140	01 .88934200 - Svstem
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.17 Hours
Factors	3.57 h						
	T	1			T	0.88934 [SYS 06140	
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.42lHours
Factors	6.1 h						
			L		T	0.88934 [SYS 06140	
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.72 Hours
Factors	1.93 h						
			L		1		01 .88934200 - Svstem
751	OVERTIME BASE & PRE.	L C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	10.94lHours
Factors	12.3 h						.1
	0./50=1.45 0.05 0.055	1	DI LIN IDEDO AND DIDEFITTEDO	1/5 / 6/ /		0.88934 ISYS 06140	
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.12 Hours
Factors	2.38 h					0.00004 50000 00440	01 00004000 0 4
754	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	IZE40II	Indust/Site Srvs Steelworkers	0.88934 ISYS 06140	
751		C090	STRUCTURAL AND METAL WORKE	KETUH	indust/Site Srvs Steelworkers	Linear	4.68 Hours
Factors	5.26 h					0.88934 [SYS 06140	01 00004000 Cuetem
751	OVERTIME BASE & PRE.	B070	WASTE TREATMENT OPERATOR A	VE10U	Indust/Site Save Steelwerkers	0.88934 1515 06140 Linear	1.59 Hours
Factors	1.79 h	I KU/U	WASIL IREALWENT OFERATOR A	I I I I I I	indust/Site Sivs Steetworkers	Lilieai	1.ออกบนโร
ructors	1.79 11					0.88934 [SVS.06140	0] .88934200 - System
A5C	SUPPLIES	0000	NONE	C210S	Facilities Momt & Maintenance	Linear	8,479.82 Dollars
Factors	9394.03 d	, 5556	1.015 FY00 Escalation	, ,,,,,,,	The state of the s		

Line Item 1a - Corrective maintenance

0.88934 [SYS 061400] .88934200 - System

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 123 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$686.56 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 74% of the FY 99

budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficency return.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 32.31% (includes Linemen)

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08%

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WBS No: 1EFB10 1EFB0405 Activity ID:

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl 1EFB

Activity Filter Starts In FY * Metal Worker 4.62% This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions. Resources

inis escimace includes a projec	st productivity/efficiency factor for	committed but as yet underined cost reduc	ectons.	1
Cost Element	Skill	Department	Curve	Ouantity Units
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	133.93 Hours
actors 150.59 h			0.88834 [SVS 061	4001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	89.28 Hours
actors 100.39 h				001201110310
			0.88934 [SYS 061	4001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	145.09 Hours
actors 163.14 h				
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	0.88934 ISYS 061 Linear	4001 .88934200 - Svstem 193.44 Hours
actors 217.51 h	C020 ELECTRICIANS	RETURN IIII UUSI/SILE SIVS SLEEIWOIKEIS	Lilleal	193.44 FIOUIS
217.51			0.88934 [SYS 061	4001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	184.75 Hours
actors 207.74 h				
				4001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	44.64 Hours
actors 50.2 h			0.00004 10000.004	4001 00004000 0
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	0.88934 15 15 06 1 Linear	4001 .88934200 - Svstem 215.74 Hours
actors 242.58 h	1 COZO ILLECTIVICIANO	TC 1011 IIIIddsVoite SIVS SteetWorkers	Linear	210.741110013
2.2.00			0.88934 [SYS 061	4001 .88934200 - Svsten
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (inc	cl Exp KE10H Indust/Site Srvs Steelworkers	Linear	89.28 Hours
actors 100.39 h				
				4001 .88934200 - Svstem
750 STRAIGHT TIME BASE	I C040 IMAINTENANCE MACHINIST (inc	CLEXD KE10H Indust/Site Srvs Steelworkers	Linear	14.88 Hours
actors 16.73 h			190 272] 15088 0	4001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (inc	CLEXD KE10H Indust/Site Srvs Steelworkers	Linear	74.40 Hours
actors 83.66 h				
			0.88934 [SYS 061	4001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	89.28 Hours
actors 100.39 h			0.00004 10000	4001 00004000 0
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 ISYS 061 Linear	4001 .88934200 - Svstem 152.51 Hours
actors 171.49 h	1 COTO IFAINTENS	NETOT IIIIdus//Site SIVs Steelworkers	Lilleal	132.311110015
			0.88934 [SYS 061	4001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	59.52 Hours
actors 66.93 h				
				400] .88934200 - System
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	48.34 Hours
actors 54.36 h			0.88034 ISVS 061	400] .88934200 - System
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	0.66934 1313 061 Linear	307.57 Hours
Factors 345.84 h	, , , , , , , , , , , , , , , , , , , ,		E	33.13.1110010
			0.88934 [SYS 061	400] .88934200 - System
750 STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL WO	ORKE KE10H Indust/Site Srvs Steelworkers	Linear	131.44 Hours
<i>actors</i> 147.79 h				
·	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	0.88934 [SYS 061	4001 .88934200 - Svstem

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter

Baseline Devl 1EFB

121 20 100	Baseline Co	ost and Basis of Estimate Activity File Activity	ter * Starts In FY *
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 7.26 Hours
Factors 8.16 h			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 4.46 Hours
Factors 5.02 h	T OUT TO MINI ENTERNO	TILE TO THIRD GOVERNMENTS	
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400] .88934200 - Syster Linear 6.70 Hours
Factors 7.53 h	TOO IO NIN EIN EIN	TICE OF THIRDS ON ON ON ON ON	
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400] .88934200 - Syster Linear 10.79 Hours
Factors 12.13 h			
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	0.88934
Factors 10.39 h			
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400] .88934200 - Syster Linear 2.98 Hours
actors 3.35 h			
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	0.88934
Factors 10.88 h			0.00004 [0]VO.0044001 00004000 0
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (inc	ELEXP KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400] .88934200 - Syster Linear 4.46 Hours
factors 5.02 h			0.00004 [0]VO.004400] 00004000 0
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (inc	Exp KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400] .88934200 - System Linear 0.75 Hours
Factors 0.84 h			
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (inc	ELEXP KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400] .88934200 - System Linear 3.72 Hours
Factors 4.18 h			
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400] .88934200 - Syster Linear 4.46 Hours
factors 5.02 h			
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	0.88934
Factors 8.57 h			
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400] .88934200 - Syster Linear 15.38 Hours
Factors 17.29 h	T COOU IF LOWIDLING AND FIF LITTLING	TAL TOTA IIITUUSVSILE SIVS SLEEIWOIKEIS	
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400] .88934200 - Syster Linear 2.42 Hours
Factors 2.72 h	T COOL II ECIMBEILO / III E I II I E I II	TILE TO THIS MAN ON O CHO CHO THE TOTAL CONTROLL	
751 OVERTIME BASE & PRE.	C090 STRUCTURAL AND METAL WC	RKE KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400] .88934200 - Syster Linear 6.57 Hours
Factors 7.39 h			
751 OVERTIME BASE & PRE.	R070 WASTE TREATMENT OPERATO	OR A KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400] .88934200 - Syster Linear 2.23 Hours
factors 2.51 h			
A5C SUPPLIES	0000 NONE	C210S Facilities Momt & Maintenance	0.88934 [SYS 061400] .88934200 - Svster Linear 11.919.40 Dolla
Factors 13204.4 d	1.015 FY00 Escalation		
Corrective maintenance			0.88934 [SYS 061400] .88934200 - System

Line Item 1c - Corrective maintenance

BOE Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily

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1EFB10 1EFB0405

WBS No:

Activity ID:

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Baseline Devl WBS Filter 1EFB

Activity Filter *

Starts In FY

predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 16 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$209.25 average for this cluster

Adjustment factor - FY99 is used as a base year. FY00 thru 05 are equal to FY99 scope

Revised number of work orders - No Change

Basis for adjustment - Directed targets.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 30.77% (includes Linemen)

Maint. Mech 13.85% Painter 10.77%

Pipefitter 23.08% Metal Worker 4.62%

Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es	Cost Element	Skill	Department	Curve	Ouantity Units
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	5.75 Hours
Factors	6.47 h			0.00024 [CVC.06440	01 00024200 Cyatam
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srys Steelworkers	0.88934 [SYS 06140 Linear	5.31 Hours
Factors	5.97 h	COTO ICANFENTENS	RETOTI IIIIdusVoite Sivs Steelworkers	Lilleal	J.31 110u15
1 aciors	0.57			0.88934 [SYS 06140	01 .88934200 - Svstem
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	3.54 Hours
Factors	3.98 h				
				0.88934 [SYS 06140	01 .88934200 - Svstem
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	7.33 Hours
Factors	8.24 h				
				0.88934 [SYS 06140	
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	8.56lHours
Factors	9.62 h				
750	OTRAIGUE TIME RAGE	OCCO EL FOTDIOIANO	1/5/011 1 1 1/0% 0 0/ 1 1	0.88934 [SYS 06140	
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	7.67 Hours
Factors	8.62 h			0.88934 [SYS 06140	01 88934200 - System
750	STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear	3.54 Hours
Factors	3.98 h				
		<u></u>		0.88934 [SYS 06140	01 .88934200 - Svstem
750	STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear	0.59 Hours
Factors	0.66 h				
				0.88934 [SYS 06140	01 .88934200 - Svstem
750	STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear	2.95 Hours
Factors	3.32 h				
				0.88934 [SYS 06140	0] .88934200 - System

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WBS No: 1EFB10 1EFB0405 Activity ID:

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter 1E
Activity Filter *

Baseline Devl 1EFB

T50 STRAIGHT TIME BASE C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers Linear	Starts In FY * 3.54 Hours
1.0 1.0	
T50 STRAIGHT TIME BASE CO70 PAINTERS KE10H Indust/Site Srvs Steelworkers Linear 6.8 h CO80 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers Linear Factors 2.16 h CO80 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers Linear Factors 13.71 h CO80 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers Linear Factors 13.71 h CO80 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers Linear Factors 2.65 h CO80 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers Linear Factors 2.65 h CO80 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers Linear Factors 5.86 h CO80 STRAIGHT TIME BASE CO90 STRUCTURAL AND METAL WORKE KE10H Indust/Site Srvs Steelworkers Linear Factors 5.86 h CO80 STRAIGHT TIME BASE CO90 STRUCTURAL AND METAL WORKE KE10H Indust/Site Srvs Steelworkers Linear Factors 1.99 h CO80 STRAIGHT TIME BASE RO70 WASTE TREATMENT OPERATOR A KE10H Indust/Site Srvs Steelworkers Linear CO80 STRAIGHT TIME BASE STVS OF CO80 STRAIGHT TIME BASE STVS Steelworkers Linear CO80 STRAIGHT TIME BASE STVS OF CO80 STRAIGHT TIME BASE STVS Steelworkers Linear CO80 STRAIGHT TIME BASE STVS OF CO80 STRAIGHT TIME BASE STVS Steelworkers Linear CO80 STRAIGHT TIME BASE STVS OF CO80 S	1.4001 00024200 Custom
T50 STRAIGHT TIME BASE C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers Linear	6.05 Hours
T50 STRAIGHT TIME BASE C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers Linear 2.16 h T50 STRAIGHT TIME BASE C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers Linear T50 STRAIGHT TIME BASE C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers Linear T50 STRAIGHT TIME BASE C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers Linear T50 STRAIGHT TIME BASE C090 STRUCTURAL AND METAL WORKE KE10H Indust/Site Srvs Steelworkers Linear T50 STRAIGHT TIME BASE C090 STRUCTURAL AND METAL WORKE KE10H Indust/Site Srvs Steelworkers Linear T50 STRAIGHT TIME BASE R070 WASTE TREATMENT OPERATOR A KE10H Indust/Site Srvs Steelworkers Linear T50 STRAIGHT TIME BASE R070 WASTE TREATMENT OPERATOR A KE10H Indust/Site Srvs Steelworkers Linear 0.88934 ISYS 06	
2.16 h	14001 .88934200 - Svstem 1.92 Hours
0.88934 ISYS 06	1.921Hours
13.71 h	14001 .88934200 - Svstem
0.88934 ISYS 06	12.19 Hours
T50 STRAIGHT TIME BASE C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers Linear C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers Linear C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers Linear C080 STRAIGHT TIME BASE C090 STRUCTURAL AND METAL WORKE KE10H Indust/Site Srvs Steelworkers Linear C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers Linear C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers Linear C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers Linear C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers Linear C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers Linear C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers Linear C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers Linear C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers Linear C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers Linear C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers Linear C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers Linear C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers Linear C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers Linear C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers Linear C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers Linear C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers Linear C080 PLUMBERS AND PIPEFITTERS LINEAR AND PIPEFITTERS LINE	14001 .88934200 - Svstem
0.88934 ISYS 06	2.36 Hours
750 STRAIGHT TIME BASE C090 STRUCTURAL AND METAL WORKE KE10H Indust/Site Srvs Steelworkers Linear Factors 5.86 h 750 STRAIGHT TIME BASE R070 WASTE TREATMENT OPERATOR A KE10H Indust/Site Srvs Steelworkers Linear Factors 1.99 h 0.88934 ISYS 06	
Factors 5.86 h 750 STRAIGHT TIME BASE R070 WASTE TREATMENT OPERATOR A KE10H Indust/Site Srvs Steelworkers Linear Factors 1.99 h 0.88934 ISYS 06	14001 .88934200 - System 5.21 Hours
750 STRAIGHT TIME BASE R070 WASTE TREATMENT OPERATOR A KE10H Indust/Site Srvs Steelworkers Linear Factors 1.99 h 0.88934 ISYS 06	3.21II louis
Factors 1.99 h 0.88934 [SYS.06	14001 .88934200 - Svstem
0.88934 ISYS 06	1.77 Hours
000001 1010 00	14001 .88934200 - Svstem
751 OVERTIME BASE & PRE. C010 CARPENTERS KE10H Indust/Site Srvs Steelworkers Linear	0.18 Hours
Factors 0.2 h	
751 OVERTIME BASE & PRE. C010 CARPENTERS KE10H Indust/Site Srvs Steelworkers Linear	1400] .88934200 - System 0.28 Hours
Factors 0.32 h	0.20 110013
0.88934 [SYS 06	1400] .88934200 - System
751 OVERTIME BASE & PRE. C010 CARPENTERS KE10H Indust/Site Srvs Steelworkers Linear	0.27 Hours
Factors 0.3 h 0.88934 ISYS.06	1400] .88934200 - System
751 OVERTIME BASE & PRE. C020 ELECTRICIANS KE10H Indust/Site Srvs Steelworkers Linear	0.43 Hours
Factors 0.48 h	
751 OVERTIME BASE & PRE. C020 ELECTRICIANS KE10H Indust/Site Srvs Steelworkers Linear	14001 .88934200 - Svstem 0.36 Hours
Factors 0.41 h	0.301110015
0.88934 ISYS 06	14001 .88934200 - Svstem
751 OVERTIME BASE & PRE. C020 ELECTRICIANS KE10H Indust/Site Srvs Steelworkers Linear	0.38 Hours
Factors 0.43 h 0.88934 ISYS.06	14001 .88934200 - Svstem
751 OVERTIME BASE & PRE. C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers Linear	0.15 Hours
Factors 0.17 h	
751 OVERTIME BASE & PRE. C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers Linear	14001 .88934200 - Svstem 0.18 Hours
Factors 0.2 h	U. TOIL TOURS
0.88934 ISYS 06	14001 .88934200 - Svstem
751 OVERTIME BASE & PRE. C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers Linear	0.03 Hours
Factors 0.03 h 0.88934 ISYS.06	
751 OVERTIME BASE & PRE. C070 PAINTERS KE10H Indust/Site Srvs Steelworkers Linear	14001 88934200 - System
Factors 0.34 h	14001 .88934200 - Svstem 0.30 Hours
0.88934 [SYS 06	0.30 Hours

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter

Baseline Devl Iter 1EFB

		Daseille Cost all	u D uoio	Activ	vity Filter *	Starts In FY *
751 OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.18 Hours
Factors 0.2 h						
					0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.61 Hours
Factors 0.69 h						
					0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.10 Hours
Factors 0.11 h						
					0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.12 Hours
Factors 0.13 h						
				T	0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	0.26 Hours
Factors 0.29 h						
					0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	0.09 Hours
Factors 0.1 h						
					0.88934 [SYS 06140	01 .88934200 - Svstem
A5C SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	472.53 Dollars
<i>Factors</i> 523.47 d		1.015 FY00 Escalation				

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 82 preventative maintenance work actions are expected.

Data Source - Maintenance Management System and P&I Reporting System CPRs and Spending variance reports for FY98 Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$112.28 average

Unit Adjustment factor - FY99 is used as a base year. FY00 thru 05 are expectred to require the same level of effort as FY99

Revised number of work orders -None

Basis for adjustment -None

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50% Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es		Cost Element		Skill		Department	Curve	Ouantity	Units	ı
	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	127.03	Hours	J
	Factors	1/2 8/1 h								

Factors 142.84 h

750 STRAIGHT TIME RASE CO40 MAINTENANCE MACHINIST (incl Eyn KE10H Indust/Site Stre Steelworkers Linear 95.39 Hours							0.88934 ISYS 06140	01.88934200 - Svstem
730 ISTRAIGHT HIVE DASE CO40 IIVIANTENANCE WACHINIST HILLEAD I RETUIT IIIIUUSVSILE SIVS SILEEWOIREIS EILIEGI 93,2011 IUUS	75	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	95.28 Hours

Factors 107.13 h

0.88934 [SYS 061400] .88934200 - System

0.88934 [SYS 061400] .88934200 - System

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Ba WBS Filter 1E

Baseline Devl 1EFB

		baseline Cost an	u basis	or Estimate Activit	ty Filter *		Starts In FY *
750 STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Lin	near	14.54 Hours
Factors 16.35 h							
					0.88934	ISYS 061400	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Lin	near	6.35 Hours
Factors 7.14 h							
					0.88934	ISYS 061400	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Lin	near	4.77 Hours
Factors 5.36 h							
	Г				0.88934	ISYS 061400	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Lin	near	0.73 Hours
Factors 0.82 h							
	Г				0.88934	ISYS 061400	01 .88934200 - Svstem
A5C SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Lin	near	942.20 Dollars
Factors 1043.78 d		1.015 FY00 Escalation					

Line Item 3a - Preventive maintenance

BOE

0.88934 [SYS 061400] .88934200 - System

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site

maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 144 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$95.35 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 74% of the FY 99 budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficency return.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50% Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

,	Cost Element		. Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	178.56	Hours
Factors	200.78 h							
		ı		I		0.88934 [SYS 06140	01 .88934200 -	Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	133.93	Hours
Factors	150.59 h							
		,		,	1	0.88934 [SYS 06140	01.88934200 -	Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	20.44	Hours
Factors	22.98 h							
		,		,		0.88934 [SYS 06140	01.88934200 -	Svstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	8.93	Hours
Factors	10.04 h							
						0.88934 ISYS 06140	01.88934200 -	System

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Baseline Devl WBS Filter 1EFB

		Baseline Cost ar	d Basis	of Estimate	Activity Filter	*	Starts In FY *
751 OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	6	Linear	6.70 Hours
Factors 7.53 h							
						0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	3	Linear	1.02 Hours
Factors 1.15 h							
						0.88934 [SYS 06140	01 .88934200 - Svstem
A5C SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenand	ce	Linear	1.324.38 Dollars
Factors 1467.16 d		1.015 FY00 Escalation					

Line Item 3c - Preventive maintenance

0.88934 [SYS 061400] .88934200 - System

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 18 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98 Item Desc - Fiscal Year Preventive Maintenance Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$30.28 average in this cluster

Adjustment factor - FY99 is used as a base year. FY00 thru 05 are equal to FY99 scope

Revised number of work orders - No Change Basis for adjustment - Directed targets.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50% Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

s	Cost Element		Skill		Department	Curve	Ouantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	7.08	Hours
Factors	7.96 h							
						0.88934 [SYS 06140	01 .88934200 - 3	Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	5.31	Hours
Factors	5.97 h							
						0.88934 [SYS 06140	01 .88934200 - 3	Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.81	Hours
Factors	0.91 h							
						0.88934 [SYS 06140	01 .88934200 - 3	Svstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.36	Hours
Factors	0.4 h							
_						0.88934 [SYS 06140	01.88934200 - 3	Svstem
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.27	Hours
Factors	0.3 h							
						0.88934 [SYS 06140	0] .88934200 - 3	System

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter

Baseline Devl 1EFB

					ACTIVITY FUTER		Starts in F1
751	OVERTIN	IE BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	0.04 Hours
Factors	0.05	h					
						0.88934 [SYS 06140	001 .88934200 - Svstem

C210S Facilities Mamt & Maintenance

Factors 58.16 d 1.015 -- FY00 Escalation --

0000 NONE

0.88934 [SYS 061400] .88934200 - System

52.50 Dollars

Line Item SYS - Contingency And Escalation

A5C SUPPLIES

BOE

Resources

es		Cost Element		Skill		Department	Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	24.942.95	Dollars
	Factors	24943 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	9.570.11	Dollars

Factors 9570.11 Dollars

Activity ID: 1EFB0410 Description: Security Bldgs Cluster Landlord Functions, FY04

Cost Risk 2 Schedule Risk

. .

ACTIVITY ID. IE	Description. Security Blugs Cluster Land	iora i uricul	115, 1 104					Cost Risk	Z Schedule I	usk		
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
1 Corrective maintenance			each	HC	1.475	1.475	31.773	8.480	0	40.253	8.960	49.213
1c Corrective maintenance			1.00 each		82	82	1.771	473	0	2.243	499	2.743
3	3 Preventive maintenance		each	HC	249	249	5.450	942	0	6.392	1.537	7.929
3c	Preventive maintenance	1.00	each	HC	14	14	304	52	0	356	86	442
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	8.598	8.598	0	8.598
	To			0:		1.819	39.298	9.947	8.598	57.843	11.082	68.925

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

Approximately 116 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$488.44 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 thru 05 are expectred to require the same level of effort as FY99

Revised number of work orders -None

Basis for adjustment -None

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 30.77% (includes Linemen)

Maint. Mech 13.85% Painter 10.77%

Pipefitter 23.08% Metal Worker 4.62%

Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Ouantity	Units

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Ba
WBS Filter 1E
Activity Filter *

Baseline Devl 1EFB

	Baseline Cost a	nd Basis o	nt Estimate		1EFB *	Starts In FY *
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H I	ndust/Site Srvs Steelworkers	cuvuv Fuier	Linear	63.52 Hours
Factors 71.42 h						
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H I	ndust/Site Srvs Steelworkers		0.88934 ISYS 0614 Linear	4001 .88934200 - Svstem 103.22 Hours
Factors 116.06 h	1 COTO ICARPENTERS	I KETUH II	Huusi/Site Sivs Steelworkers		Lilleal	103.22IFIOUIS
					0.88934 [SYS 0614	4001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H I	ndust/Site Srvs Steelworkers		Linear	95.28 Hours
Factors 107.13 h					0.00004 [0)/0.004	400] 00004000 0
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H I	ndust/Site Srvs Steelworkers		0.88934 ISYS 0614 Linear	4001 .88934200 - Svstem 131.44 Hours
Factors 147.79 h	1 0020 ILLEO HAIONARO		nadstroke orvs olectworkers	"	Lincal	101.441110013
					0.88934 [SYS 0614	4001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H	ndust/Site Srvs Steelworkers		Linear	153.48 Hours
Factors 172.58 h					0.00004 [CVC.064	4001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H I	ndust/Site Srvs Steelworkers		0.88934 1515 0614 Linear	137.63 Hours
Factors 154.75 h	TOTAL MELOTINOVINO				201020	
					0.88934 [SYS 0614	4001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp.	KE10H I	ndust/Site Srvs Steelworkers		Linear	63.52 Hours
Factors 71.42 h					0.00034 [676.064	4001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H I	ndust/Site Srvs Steelworkers		U.00934 1313 0014	52.93 Hours
Factors 59.52 h						
						400] .88934200 - System
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H I	ndust/Site Srvs Steelworkers		Linear	10.58 Hours
Factors 11.9 h					0.88934 ISVS 0614	400] .88934200 - System
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H I	ndust/Site Srvs Steelworkers		Linear	108.50 Hours
Factors 122 h						
	1					400] .88934200 - System
750 STRAIGHT TIME BASE Factors 71.42 h	C070 PAINTERS	KE10H	ndust/Site Srvs Steelworkers		Linear	63.52 Hours
raciors 71.42 II					0.88934 [SYS 0614	4001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H	ndust/Site Srvs Steelworkers		Linear	218.81 Hours
Factors 246.04 h						
OTD 41011T TIME D 405	0000 0000000000000000000000000000000000	1/5 (0) 1	1 (0) 0 0 1 1			4001 .88934200 - Svstem
750 STRAIGHT TIME BASE Factors 38.68 h	C080 PLUMBERS AND PIPEFITTERS	KE10H II	ndust/Site Srvs Steelworkers		Linear	34.40 Hours
<i>racions</i> 30.00 II					0.88934 [SYS 0614	4001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H I	ndust/Site Srvs Steelworkers		Linear	42.34 Hours
Factors 47.61 h						
750 OTDAIGUT TIME DAGE	C090 STRUCTURAL AND METAL WORKE	I/E40II I	- dt/0:t- 0 0tl			4001 .88934200 - Svstem 93.51 Hours
750 STRAIGHT TIME BASE Factors 105.15 h	T C090 ISTRUCTURAL AND METAL WORKE	I KETUH II	ndust/Site Srvs Steelworkers		Linear	93.51IHOUIS
100.10 11					0.88934 [SYS 0614	4001 .88934200 - Svstem
750 STRAIGHT TIME BASE	R070 WASTE TREATMENT OPERATOR A	KE10H I	ndust/Site Srvs Steelworkers		Linear	31.76 Hours
Factors 35.71 h						
754 OVEDTIME DAGE 9 DDE	CO40 CARRENTERS	VE40U	ndust/Cita Onio Otli			4001 .88934200 - Svstem
751 OVERTIME BASE & PRE. Factors 5.36 h	C010 CARPENTERS	KE1UH II	ndust/Site Srvs Steelworkers		Linear	4.77 Hours
11 U.JU II						

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filter

Baseline Devl 1EFB

IEFB0410	Baseline Cost	and Basis of Estimate Activity File Activity File		Starts In FY *
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	5.16 Hours
Factors 5.8 h			0.00024 1076 0044	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	0.00934 1313 0014 Linear	3.17 Hours
Factors 3.57 h				
754 OVERTIME DAGE 8 DDE	COOR ELECTRICIANO	KE10H Indust/Site Srys Steelworkers		001 .88934200 - Svstem 6.57 Hours
751 OVERTIME BASE & PRE. Factors 7.39 h	C020 ELECTRICIANS	KETUH IIndust/Site Srvs Steelworkers	Linear	6.5/IHOUIS
1.00			0.88934 [SYS 0614	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	6.88 Hours
Factors 7.74 h			0.880.24 1.67.50.00	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	0.88934 1313 0014 Linear	7.68 Hours
Factors 8.63 h				
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Ex		0.88934 [SYS 0614 Linear	001 .88934200 - Svstem 3.17 Hours
Factors 3.57 h	1 C040 IMAINTENANCE MACHINIST (Incl Ex	KD KETUH Indust/Site Srvs Steelworkers	Linear	3.17IHOURS
0.07			0.88934 [SYS 0614	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Ex	KE10H Indust/Site Srvs Steelworkers	Linear	0.53 Hours
Factors 0.6 h			0.00034 [6V6.0614	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Ex	KE10H Indust/Site Srvs Steelworkers	0.00934 1313 0014 Linear	2.65 Hours
Factors 2.98 h				
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers		00] .88934200 - System 3.17 Hours
Factors 3.57 h	C0/0 PAINTERS	RETUR Indust/Site Sit/s Steetworkers	Linear	3.17 HOUIS
			0.88934 [SYS 0614	00] .88934200 - System
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	5.42 Hours
Factors 6.1 h			0.88934 [SVS.0614	00] .88934200 - System
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	2.12 Hours
Factors 2.38 h				
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 0614 Linear	001 .88934200 - Svstem 10.94 Hours
Factors 12.3 h	C080 IPLUIVIBERS AND PIPEFITTERS	RETURN IIIIdust/Site Sivs Steelworkers	Linear	10.94Inouis
			0.88934 [SYS 0614	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	1.72 Hours
Factors 1.93 h			0.808.0 57.5 1.608.0	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C090 STRUCTURAL AND METAL WORK	E KE10H Indust/Site Srvs Steelworkers	0.88934 1313 0014 Linear	4.68 Hours
Factors 5.26 h				
754 OVERTIME DAGE 8 DD5	DOZO WAGTE TREATMENT CREDATOR	A VEACLE Indust/City Cours Observed		001 .88934200 - Svstem 1.59 Hours
751 OVERTIME BASE & PRE. Factors 1.79 h	R070 WASTE TREATMENT OPERATOR	A KETUH INDUST/SITE STVS STEETWORKERS	Linear	1.59IHours
1.10			0.88934 [SYS 0614	001 .88934200 - Svstem
A5C SUPPLIES	0000 NONE	C210S Facilities Mamt & Maintenance	Linear	
<i>Factors</i> 9394.03 d	1.015 FY00 Escalation		0.00034 1676.0644	001 .88934200 - System
			U.00934 1313 U014	UUI .009342UU - 3VSlem

Line Item 1c - Corrective maintenance

0.88934 [SYS 061400] .88934200 - System

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect E
WBS Filter 1
Activity Filter **

Baseline Devl 1EFB

lter * Starts In FY

was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 16 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$209.25 average for this cluster

Adjustment factor - FY99 is used as a base year. FY00 thru 05 are equal to FY99 scope

Revised number of work orders - No Change Basis for adjustment - Directed targets.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 30.77% (includes Linemen)

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Cost Element		Skill		Department	Curve	Quantity Units	
750	STRAIGHT	TIME BASE	C010	CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	5.75 Hours
Factors	6.47	h				0.88934 ISYS 06140	001 .88934200 - Svstem
750	STRAIGHT	TIME BASE	C010	CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	5.31 Hours
Factors	5.97	h				0.88934 ISYS 06140	001 .88934200 - Svstem
750	STRAIGHT	TIME BASE	C010	CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	3.54 Hours
Factors	3.98	h				0.88934 ISYS 06140	001 .88934200 - Svstem
750	STRAIGHT	TIME BASE	C020	ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	8.56 Hours
Factors	9.62	h				0.88934 ISYS 06140	001 .88934200 - Svstem
750	STRAIGHT	TIME BASE	C020	ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	7.33 Hours
Factors	8.24	h				0.88934 ISYS 06140	001 .88934200 - Svstem
750	STRAIGHT	TIME BASE	C020	ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	7.67 Hours
Factors	8.62	h				0.88934 ISYS 06140	001 .88934200 - Svstem
750	STRAIGHT	TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear	3.54 Hours
Factors		h				0.88934 ISYS 06140	001 .88934200 - Svstem
750	STRAIGHT	TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear	2.95 Hours
Factors		h				0.88934 ISYS 06140	001 .88934200 - Svstem
750	STRAIGHT		C040	MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear	0.59 Hours
Factors	0.66	h				0.88934 ISYS 06140	001 .88934200 - Svstem
750	STRAIGHT	TIME BASE	C070	PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	3.54 Hours
Factors	3.98	h			·	0.88934 ISYS 06140	001 .88934200 - Svstem

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Ba
WBS Filter 1E
Activity Filter *

Baseline Devl ter 1EFB

1EFB0410	Baseline Cost ar	d Basis of Estimate	WBS Filter 1EFB Activity Filter *	Starts In FY *
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelwo		6.05 Hours
Factors 6.8 h			0.00004 FCVC 00	C4 400] 0000 4000
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwo		614001 .88934200 - System 1.92 Hours
Factors 2.16 h	. 333 2011.221.37.4.32 21.11.21.32			
TEO OTRAIGUIT TIME DAGE	OCCUPATION AND DIRECTOR	KE4011 1 1 1/0': 0 0: 1		514001 .88934200 - Svstem 12.19 Hours
750 STRAIGHT TIME BASE Factors 13.71 h	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwo	rkers Linear	12.19IHours
10.77			0.88934 ISYS 06	614001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwo		2.36 Hours
Factors 2.65 h			0.88931 1575.06	514001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL WORKE	KE10H Indust/Site Srvs Steelwo		5.21 Hours
Factors 5.86 h				
750 STRAIGHT TIME BASE	R070 WASTE TREATMENT OPERATOR A	KE10H Indust/Site Srvs Steelwo		514001 .88934200 - Svstem 1.77 Hours
Factors 1.99 h	1 RU/U IWASTE TREATIVIENT OPERATOR A	RETUR IIIIdus/Site Sivs Steelwo	ikeis i Lilleai	1.//Inouis
				614001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelwo	rkers Linear	0.18 Hours
Factors 0.2 h			0.88034 1676.00	514001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelwo		0.28 Hours
Factors 0.32 h				
754 OVEDTIME DAGE 8 DDE	C010 CARPENTERS	IVEAUL Indust/Oite Court Ote above		61400] .88934200 - System 0.27 Hours
751 OVERTIME BASE & PRE. Factors 0.3 h	CUIU CARPENIERS	KE10H Indust/Site Srvs Steelwo	rkers Linear	U.27 Hours
1 401075 0.0			0.88934 [SYS 06	61400] .88934200 - System
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwo	rkers Linear	0.43 Hours
Factors 0.48 h			0.00034 1676 0	51400] .88934200 - System
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwo	rkers Linear	0.36 Hours
Factors 0.41 h				
OVERTUE DAGE & DRE	0000 515050101010	VE-1011 1 1 1/011 0 0 1	0.88934 ISYS 06	614001 .88934200 - Svstem
751 OVERTIME BASE & PRE. Factors 0.43 h	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwo	rkers Linear	0.38 Hours
1 4010/3 0.40 11			0.88934 [SYS 06	614001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelwo	rkers Linear	0.03 Hours
Factors 0.03 h			0.00004 10000.00	24.4001.0000.4000
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srys Steelwo		614001 .88934200 - System 0.15 Hours
Factors 0.17 h				51101110410
			0.88934 ISYS 06	614001 .88934200 - Svstem
751 OVERTIME BASE & PRE. Factors 0.2 h	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelwo	rkers Linear	0.18 Hours
raciois 0.2 II			0.88934 [SYS 06	614001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelwo		0.30 Hours
Factors 0.34 h			<u>-</u>	
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelwo	0.88934 [SYS 06 rkers Linear	614001 .88934200 - Svstem 0.18 Hours
Factors 0.2 h	I GUIU IFAIINI ENS	LVETOL IIIIIIII SIAS 21661M0	ingis Lillegi	U. IOITIOUIS
			0.8084 1675 06	61400] .88934200 - System

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl 1EFB

.2. 200	Baseline Cost an	nd Basis of Estimate	Filter *	Starts In FY *
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	0.61 Hours
Factors 0.69 h				
			0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	0.10 Hours
Factors 0.11 h				
			0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	0.12 Hours
Factors 0.13 h				
			0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C090 STRUCTURAL AND METAL WORKE	KE10H Indust/Site Srvs Steelworkers	Linear	0.26 Hours
Factors 0.29 h				
			0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	R070 WASTE TREATMENT OPERATOR A	KE10H Indust/Site Srvs Steelworkers	Linear	0.09 Hours
Factors 0.1 h				
			0.88934 [SYS 06140	01 .88934200 - Svstem
A5C SUPPLIES	0000 NONE	C210S Facilities Mamt & Maintenance	Linear	472.53 Dollars
Factors 523.47 d	1.015 FY00 Escalation			

Line Item 3 - Preventive maintenance

0.88934 [SYS 061400] .88934200 - System

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance backlog and projected work load. These items were the basis from which RFCSS proposed negotiated and was awarded the Site

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

 \cdot Approximately 82 preventative maintenance work actions are expected.

Data Source - Maintenance Management System and P&I Reporting System CPRs and Spending variance reports for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$112.28 average

Unit Adjustment factor - FY99 is used as a base year. FY00 thru 05 are expectred to require the same level of effort as FY99

Revised number of work orders -None

Basis for adjustment -None

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50%

Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

s	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	127.03	Hours
Factors	142.84 h							
						0.88934 [SYS 06140	001 .88934200 - 3	3vstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	95.28	Hours
Factors	107.13 h							
						0.88934 [SYS 06140	001 .88934200 - 9	3vstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	14.54	Hours
Factors	16.35 h							
						0.88934 [SYS 06140	001 .88934200 - 9	System

WBS No: 1EFB10 1FFR0410 Activity ID:

Rocky Flats Closure Project

Baseline Devl Proiect WRS Filter 1FFR

TET 00410		Baseline Cost and Basis of Estimate			WDS Filler	ILIB	
					Activity Filter	*	Starts In FY *
751 OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	3	Linear	6.35 Hours
Factors 7.14 h							
						0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	3	Linear	4.77 Hours
Factors 5.36 h							
						0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	3	Linear	0.73 Hours
Factors 0.82 h							
						0.88934 [SYS 06140	01 .88934200 - Svstem
A5C SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenand	ce	Linear	942.20 Dollars
Factors 1043.78 d		1.015 FY00 Escalation					
						0.88934 [SYS 06140	01 .88934200 - System

Line Item 3c - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

Approximately 18 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$30.28 average in this cluster

Adjustment factor - FY99 is used as a base year. FY00 thru 05 are equal to FY99 scope

Revised number of work orders - No Change Basis for adjustment - Directed targets.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50% Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

s	Cost Element		Skill		Department	Curve	Ouantity	Units
75	0 STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	7.08	Hours
Facto	ors 7.96 h							
						0.88934 [SYS 061400	01 .88934200 - S	Svstem
75	0 STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	5.31	Hours
Facto	<i>prs</i> 5.97 h							
						0.88934 [SYS 061400	01 .88934200 - 5	Svstem
75	0 STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.81	Hours
Facto	ors 0.91 h							
						0.88934 [SYS 061400	01 .88934200 - 5	Svstem
75	1 OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.36	Hours
Facto	<i>ors</i> 0.4 h							
						0.88934 [SYS 061400	0] .88934200 - S	System

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WBS No: 1EFB10 Rocky Flats Closure Project
Activity ID: 1EFB0410 Baseline Cost and Basis of Estimate

Proiect Baseline Devl WBS Filter 1EFB Activity Filter *

751 OVERTIME BASE & PRE C040 MAINTENANCE MACHINIST (incl Exp | KE10H | Indust/Site Srvs Steelworkers 0.27 Hours Linear Factors 0.3 0.88934 [SYS 061400] .88934200 - System 751 OVERTIME BASE & PRE C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers 0.04 Hours Linear 0.05 Factors h

A5C SUPPLIES 0000 NONE C210S Facilities Mamt & Maintenance Linear 52.50 Dollars

Factors 58.16 d 1.015 -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - System

Starts In FY

Line Item SYS - Contingency And Escalation

BOE

Resources Cost Element Skill Department Curve **Ouantity** Units CON CONTINGENCY 0000 NONE ZDEPT No Department Linear 2.805.11 Dollars Factors 2805.11 Dollars ESC ESCALATION 0000 NONE ZDEPT No Department 5.792.40 Dollars Linear

Factors 5792.4 Dollars

Activity ID: 1EXXXB0310 Description: Elect. Substa. Cluster Landlord Functions, FY05 Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
1	Corrective maintenance	0.88	each	HC	1.475	1.294	27.871	7.438	0	35.310	9.699	45.009
1a	Corrective maintenance	0.65	each	HC	2.073	1.346	29.016	7.737	0	36.753	10.098	46.851
1c	Corrective maintenance	0.88	each	HC	82	72	1.553	414	0	1.968	541	2.508
3	Preventive maintenance	0.88	each	HC	249	218	4.781	826	0	5.607	1.664	7.271
3a	Preventive maintenance	0.65	each	HC	350	227	4.973	860	0	5.833	1.731	7.563
3c	Preventive maintenance	0.88	each	HC	14	12	267	46	0	313	93	405
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	58.486	58.486	0	58.486
	To	tal for Activit	v 1FXXXB03	10·		3 168	68 461	17 322	58 486	144 269	23 825	168 094

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 116 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Ttem Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$488.44 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 thru 05 are expectred to require the same level of effort as FY99

Revised number of work orders -None

Basis for adjustment -None

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 30.77% (includes Linemen)

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

Stationary Operating Engineer 1.54%

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Activity Filter

iect Baseline Devl S Filter 1EFB

Starts In FY *

S Cost Element	Skill	Department	Curve	Quantity Ur
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	103.22 Hour
Factors 116.06 h				
				14001 .88934200 - Svste
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	63.52 Hou
Factors 71.42 h			0.8084 1676 084	14001 .88934200 - Svste
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 1313 00 Linear	95.28 Hou
Factors 107.13 h		THE TOTAL THIN MAN SING STATE		00120111001
			0.88934 [SYS 061	14001 .88934200 - Svste
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	131.44 Hou
Factors 147.79 h				
750 CTDAIGHT TIME DAGE	C020 ELECTRICIANS	KEAOLL Indust/Oits Court Ots shorts and		14001 .88934200 - Svste
750 STRAIGHT TIME BASE Factors 172.58 h	I CUZU IELEC I KICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	153.48 Hou
1 112.00 II			0.88934 [SYS 061	14001 .88934200 - Svste
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	137.63 Hou
Factors 154.75 h				
	T			14001 .88934200 - Svste
750 STRAIGHT TIME BASE	I C040 IMAINTENANCE MACHINIST	(incl Exp KE10H Indust/Site Srvs Steelworkers	Linear	52.93 Hou
Factors 59.52 h			0.00004 [CVC.064	14001 .88934200 - Svste
750 STRAIGHT TIME BASE	CO40 MAINTENANCE MACHINIST	(incl Exp KE10H Indust/Site Srvs Steelworkers	0.86934 1515 06 Linear	63.52 Hou
Factors 71.42 h		THIS EXA THE TOTAL HIMMONOROUS OF TO STORY THOSE	Lilloui	OC.OZII IOWI
			0.88934 [SYS 061	14001 .88934200 - Svste
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST	(incl Exp KE10H Indust/Site Srvs Steelworkers	Linear	10.58 Hour
Factors 11.9 h				
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srys Steelworkers	0.88934 ISYS 061 Linear	14001 - 88934200 - Syste 108.50 Hou
750 STRAIGHT TIME BASE Factors 122 h	I CU/U IPAINTERS	KETUH lindust/Site Srvs Steelworkers	Linear	108.50IH0uI
racions 122 II			0.88934 [SYS.061	14001 .88934200 - Svste
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	63.52 Hou
Factors 71.42 h				
				14001 .88934200 - Svste
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTE	RS KE10H Indust/Site Srvs Steelworkers	Linear	34.40 Hou
Factors 38.68 h			0.00004 [0\/0.00	14001 00024200 0:+-
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTE	ERS KE10H Indust/Site Srys Steelworkers	0.88934 ISYS 061 Linear	14001 - 88934200 - Svste 218.81 Hou
Factors 246.04 h	1 COOO IFLOWBLING AND FIFLITITE	NE TOTT IIII dust/Site SIVS Steelworkers	Lilical	2 10.0 III lOui
			0.88934 [SYS 061	14001 .88934200 - Svste
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTE	ERS KE10H Indust/Site Srvs Steelworkers	Linear	42.34 Hour
Factors 47.61 h				
				14001 .88934200 - Svste
750 STRAIGHT TIME BASE	I C090 ISTRUCTURAL AND METAL	WORKE KE10H Indust/Site Srvs Steelworkers	Linear	93.51 Hou
Factors 105.15 h			0.00004 16/0.004	14001 .88934200 - Svste
750 STRAIGHT TIME BASE	R070 WASTE TREATMENT OPER	RATOR A KE10H Indust/Site Srvs Steelworkers	0.86934 1515 06 Linear	31.76 Hour

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter

Baseline Devl 1EFB

		st and basis of Estimate Activity Fil	ter * Starts In FY *
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 4.77 Hours
Factors 5.36 h			
754 OVEDTIME DAGE 0 DDE	OCAC CARRENTERS	1/54011 1 1 1/0% 0 00 1 1	0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE. Factors 5.8 h	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 5.16lHours
raciors 3.0 II			0.88934
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 3.17 Hours
Factors 3.57 h			
			0.88934 [SYS 061400] .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 6.57 Hours
Factors 7.39 h			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	U.88934 1313 0614001 .88934200 - System Linear 6.88 Hours
Factors 7.74 h	1 OOZO IEEEOTTAONATO	TALTOTT IIII GUSUORE OTVS OLECIWOTREIS	Linear 0.00m 100m3
			0.88934 [SYS 061400] .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 7.68 Hours
Factors 8.63 h			
			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	I C040 IMAINTENANCE MACHINIST (incl	Exp KE10H Indust/Site Srvs Steelworkers	Linear 0.53 Hours
Factors 0.6 h			0.88934
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl.	Exp KE10H Indust/Site Srvs Steelworkers	Linear 3.17 Hours
Factors 3.57 h			
			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl	Exp KE10H Indust/Site Srvs Steelworkers	Linear 2.65 Hours
Factors 2.98 h			
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400] .88934200 - System Linear 3.17 Hours
Factors 3.57 h	CU/U PAINTERS	RETUR IIIIdusi/Site Sivs Steelworkers	Lineai 3.17 nouis
raciors 3.37 II			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear 5.42 Hours
Factors 6.1 h			
			0.88934 [SYS 061400] .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear 2.12 Hours
Factors 2.38 h			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	U.88934 1313 0614001.88934200 - System Linear 1.72 Hours
Factors 1.93 h	1 0000 II EOMBEILO / IND THE EITH LEIGH	TALTOTT IIII GUSUORE OTVS OLECIWOTREIS	LIIIOGI III IOGIS
			0.88934 [SYS 061400] .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear 10.94 Hours
Factors 12.3 h			
754 0\/507145 0.405 0.005	OSSO OTRUGTURAL AND METALLINGS	NAZ TAZAGIT II TI NASA O O TI TI	0.88934 [SYS 061400] .88934200 - System Linear 4.68 Hours
751 OVERTIME BASE & PRE. Factors 5.26 h	I CU90 ISTRUCTURAL AND METAL WOR	RKE KE10H Indust/Site Srvs Steelworkers	Linear 4.68lHours
1 actors 3.20 II			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	R070 WASTE TREATMENT OPERATO	R A KE10H Indust/Site Srvs Steelworkers	Linear 1.59lHours
Factors 1.79 h			
			0.88934 [SYS 061400] .88934200 - Svstem
A5C SUPPLIES	0000 NONE	C210S Facilities Mamt & Maintenance	Linear 8.479.82 Dollars
<i>Factors</i> 9394.03 d	1.015 FY00 Escalation		0.00004 100/0.004 4003 0000 4000 6
Corrective maintenance			0.88934 [SYS 061400] .88934200 - System

Line Item 1a - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily

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1EFB10 1EXXXB0310

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Baseline Devl Proiect WBS Filter 1EFB Activity Filter

Starts In FY

Quantity

Curve

Units

predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 123 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$686.56 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 74% of the FY 99 budget per FCP 1999-8064

Department

Basis for adjustment - FCP 1999-8064 funding efficency return.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 32.31% (includes Linemen)

Cost Element

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

WBS No:

Activity ID:

Cost Lientent	DKIII	Department	Curve	Outility Onlis
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	133.93 Hours
Factors 150.59 h				
			0.88934 [SYS 06140	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	89.28 Hours
Factors 100.39 h				
			0.88934 [SYS 06140	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	145.09 Hours
Factors 163.14 h				
			0.88934 [SYS 06140	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	215.74 Hours
Factors 242.58 h				
			0.88934 [SYS 06140	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	193.44 Hours
Factors 217.51 h				
			0.88934 [SYS 06140	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	184.75 Hours
Factors 207.74 h				
			0.88934 [SYS 06140	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	44.64 Hours
Factors 50.2 h				
			0.88934 [SYS 06140	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers	Linear	14.88 Hours
Factors 16.73 h				
			0.88934 [SYS 06140	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers	Linear	74.40 Hours
Factors 83.66 h				
			0.88934 [SYS 06140	001 .88934200 - Svstem

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WBS No: 1EFB10 1EXXXB0310 Activity ID:

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Activity Filte

Baseline Devl 1EFB *

1EXXXB0310	Baseline Cost a	nd Basis of Estimate	WBS Filter 1EFB Activity Filter *	Starts In FY *
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworl		89.28 Hours
Factors 100.39 h				
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworl		14001 .88934200 - Svstem 89.28 Hours
Factors 100.39 h	1 COTO II AINTEINO	TRETOTT IIII GUSVOITE SIVS STEETWOIT	LIIIGAI	03.20110013
				14001 .88934200 - Svstem
750 STRAIGHT TIME BASE Factors 171.49 h	C070 PAINTERS	KE10H Indust/Site Srvs Steelwork	kers Linear	152.51 Hours
Factors 171.49 h			0.88934 ISYS 06	14001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworl		48.34 Hours
Factors 54.36 h			0.00004 10000	4 4001 0000 4000 0
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworl		14001 .88934200 - Svstem 307.57 Hours
Factors 345.84 h	1 000 II Editibelito / III El II I El II		SOLO EI IOMI	1 007.071110410
		T.,		14001 .88934200 - Svstem
750 STRAIGHT TIME BASE Factors 66.93 h	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwork	kers Linear	59.52 Hours
raciors 66.93 II			0.88934 ISYS 06	14001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL WORKE	KE10H Indust/Site Srvs Steelworl		131.44 Hours
Factors 147.79 h				
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworl		14001 .88934200 - Svstem 6.70 Hours
Factors 7.53 h	1 0010 107 INCLUSION	TRE TOTA IMAGINE STATE CLOSING	Linda	0.70110010
				1400] .88934200 - System
751 OVERTIME BASE & PRE. Factors 8.16 h	C010 CARPENTERS	KE10H Indust/Site Srvs Steelwork	kers Linear	7.26 Hours
raciors 6.16 II			0.88934 ISYS 06	1400] .88934200 - System
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworl	kers Linear	4.46 Hours
Factors 5.02 h			0.00004 10000	4 4001 0000 4000 0
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworl		1400] .88934200 - System 2.98 Hours
Factors 3.35 h	1 0020 ILLEO I MOI/MAG	TIL TOTT IIII GUSVOICE STVS SICCIWOTI	LII IVAI	2.301110413
				14001 .88934200 - Svstem
751 OVERTIME BASE & PRE. Factors 10.88 h	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwork	kers Linear	9.68 Hours
ractors 10.00 II			0.88934 [SYS 06	14001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworl		9.24 Hours
Factors 10.39 h				
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworl		14001 .88934200 - Svstem 10.79 Hours
Factors 12.13 h	1 0020 ILLEO I MOI/MAG	TIL TOTT IIII GUSVOICE STVS SICCIWOTI	LII IVAI	10.7 311 10013
			0.88934 [SYS 06	14001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworl	kers Linear	3.72 Hours
Factors 4.18 h			0.88934 ISYS 06	14001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworl	kers Linear	4.46 Hours
Factors 5.02 h				
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Says Steelwork	0.88934 [SYS 06 kers Linear	14001 .88934200 - Svstem 0.75 Hours
Factors 0.84 h	1 CO40 IIVIAIN LENANCE IVIACHIINIST (INCLEXD	TE TOTT HINGUS/SILE SIVS SILEEHWOIT	ZCIO LINEAL	U./ SIDUUIS
			0.88934 [SYS 06	1400] .88934200 - System

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Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter

Baseline Devl 1EFB

		- Dascille Gost al	ia Basis	Ac	tivity Filter *	Starts In FY *
751 OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	7.62 Hours
Factors 8.57 h						
				T	0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.46 Hours
Factors 5.02 h						
				T	0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.42 Hours
Factors 2.72 h						
				T	0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	15.38 Hours
Factors 17.29 h						
				T	0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	6.57 Hours
Factors 7.39 h						
					0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	2.23 Hours
Factors 2.51 h						
					0.88934 [SYS 06140	01 .88934200 - Svstem
A5C SUPPLIES	0000	NONE	C210S	Facilities Momt & Maintenance	Linear	11.919.40 Dollars
Factors 13204.4 d		1.015 FY00 Escalation				

Line Item 1c - Corrective maintenance

0.88934 [SYS 061400] .88934200 - System

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 16 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$209.25 average for this cluster

Adjustment factor - FY99 is used as a base year. FY00 thru 05 are equal to FY99 scope

Revised number of work orders - No Change

Basis for adjustment - Directed targets.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 30.77% (includes Linemen)

Maint. Mech 13.85% Painter 10 77% Pipefitter 23.08%

Metal Worker 4.62%

Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

s	Cost Element		Skill	Department	Curve	Quantity	Units	ı
	750 STRAIGHT TIME BASE	C010	CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	5.75	Hours	J
	Factors 6.47 h							
					0.88934 [SYS 06140	001 .88934200 - 3	Svstem	

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filt

Baseline Devl 1EFB

	Baseline	Cost and Basis of Estimate Activity File	ter * Starts In FY *
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 5.31 Hours
Factors 5.97 h			
750 070 410 117 7115 5 4 5 5	0040 04005::7500	VE4011 1 1 1/0% 2 2: 1 1	0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE Factors 3.98 h	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 3.54 Hours
Factors 3.98 h			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 7.33 Hours
Factors 8.24 h	. Out lead	THE FORT MINERSON STATE	
			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 8.56 Hours
Factors 9.62 h			
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	0.88934
Factors 8.62 h	I CUZU IELECTRICIANS	RETURN IIII IIII IIII III III III III III II	Lineal 7.671Hours
0.02			0.88934 [SYS 0614001.88934200 - System
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST	(incl Exp KE10H Indust/Site Srvs Steelworkers	Linear 3.54 Hours
Factors 3.98 h			
	T		0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C040 IMAINTENANCE MACHINIST	(incl Exp KE10H Indust/Site Srvs Steelworkers	Linear 0.59 Hours
Factors 0.66 h			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	CO40 MAINTENANCE MACHINIST	(incl Exp KE10H Indust/Site Srvs Steelworkers	0.88934 15 Y S 06 14 00 1 . 88934 200 - S V stem Linear 2.95 Hours
Factors 3.32 h	1 00+0 JIVII (II VI EIV) (IVOE IVII (IO III VIOI	INICI EXP NETOTI INICIONO DI VO DICCIWONICIO	Linear 2.50ji louis
			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear 3.54 Hours
Factors 3.98 h			
750 OTDAIOUT TIME DAGE	OOTO DANITEDO	1/54011 1 1 1/0% O O I I I	0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE Factors 6.8 h	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear 6.05 Hours
Factors 6.8 h			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTE	RS KE10H Indust/Site Srvs Steelworkers	Linear 12.19lHours
Factors 13.71 h			
			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTE	RS KE10H Indust/Site Srvs Steelworkers	Linear 2.36 Hours
Factors 2.65 h			0.00004 [0]/0.004400] 00004000 0
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTE	RS KE10H Indust/Site Srvs Steelworkers	0.88934
Factors 2.16 h	1 C000 IFLOWBERS AND FIFEFITTE	RS RETURN IIII III III III III III III III III	Lilleal 1.921Hours
2.10			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL V	NORKE KE10H Indust/Site Srvs Steelworkers	Linear 5.21 Hours
Factors 5.86 h			
			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	I R070 IWASTE TREATMENT OPERA	ATOR A KE10H Indust/Site Srvs Steelworkers	Linear 1.77 Hours
Factors 1.99 h			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 1515 0614001.88934200 - System Linear 0.18 Hours
Factors 0.2 h	1 SOID IO/INI ENTENO	TETOTI IIII OON OILO OI VO OILO IIVOIREIS	Linear C. foli louis
··			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 0.28 Hours
Factors 0.32 h			
			0.88934 [SYS 061400] .88934200 - System

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl 1EFB

	Dasein	Activity F	lter * Starts In FY
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 0.27
Factors 0.3 h			0.00004 [00/0.004400] 0000 (000
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srys Steelworkers	0.88934 [SYS 061400] .88934200 - S Linear 0.43
Factors 0.48 h	I CUZU IELECTRICIANS	THE TUTH THINGUS VOICE STAYS STEELWOLKERS	Lilleal 0.431
0.10			0.88934 [SYS 061400] .88934200 - S
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 0.36
Factors 0.41 h			
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srys Steelworkers	0.88934 [SYS 061400] .88934200 - S Linear 0.38
factors 0.43 h	1 COZO IELEO INICIANO	TAL TOTA III III III III III III III III III I	Lilleal
			0.88934 [SYS 061400] .88934200 - S
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIS	ST (incl Exp KE10H Indust/Site Srvs Steelworkers	Linear 0.15
Factors 0.17 h			0.88934 [SYS 0614001.88934200 - S
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIS	ST (incl Exp KE10H Indust/Site Srvs Steelworkers	0.88934 1515 0614001.88934200 - 8 Linear 0.18
Factors 0.2 h		STATION EXPERIMENTAL TOTAL INTERCOLOR	<u> </u>
			0.88934 [SYS 061400] .88934200 - S
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIS	ST (incl Exp KE10H Indust/Site Srvs Steelworkers	Linear 0.03
Factors 0.03 h			0.88934 [SYS 0614001.88934200 - S
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 ISYS 0614001.88934200 - S Linear 0.30
Factors 0.34 h	TOTO IL TANCELLO	TICE TOTA IMICAGO OTTO OLOGIWOTHOTO	2.00
			0.88934 [SYS 061400] .88934200 - S
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear 0.18
Factors 0.2 h			0.88934 [SYS 061400] .88934200 - S
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFIT	TERS KE10H Indust/Site Srvs Steelworkers	Linear 0.61
Factors 0.69 h			
			0.88934 [SYS 061400] .88934200 - S
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFIT	TERS KE10H Indust/Site Srvs Steelworkers	Linear 0.10
Factors 0.11 h			0.88934 [SYS 0614001.88934200 - S
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFIT	TERS KE10H Indust/Site Srvs Steelworkers	U.88934 1313 0014001.88934200 - C
Factors 0.13 h			
	T	T	0.88934 [SYS 061400] .88934200 - S
751 OVERTIME BASE & PRE.	C090 ISTRUCTURAL AND META	AL WORKE KE10H Indust/Site Srvs Steelworkers	Linear 0.26
Factors 0.29 h			0.88934 [SYS 0614001.88934200 - S
751 OVERTIME BASE & PRE.	R070 WASTE TREATMENT OP	ERATOR A KE10H Indust/Site Srvs Steelworkers	U.88934 1313 0614001.88934200 - 3 Linear 0.09
Factors 0.1 h			
			0.88934 [SYS 0614001.88934200 - S
A5C SUPPLIES	0000 NONE	C210S Facilities Momt & Maintenance	Linear 472.53
Factors 523.47 d	1.015 FY00 Escalat	ion	0.00024 [60/6.004.400] 0.0004.000
			0.88934 [SYS 061400] .88934200 - S

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

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 WBS No:
 1EFB10
 Rockv FI

 Activity ID:
 1EXXXB0310
 Baseline Co.

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Proiect Baseline Devl WBS Filter 1EFB Activity Filter *

Starts In FY

0.88934 [SYS 061400] .88934200 - System

·Approximately 82 preventative maintenance work actions are expected.

Data Source - Maintenance Management System and P&I Reporting System CPRs and Spending variance reports for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$112.28 average

Unit Adjustment factor - FY99 is used as a base year. FY00 thru 05 are expectred to require the same level of effort as FY99

Revised number of work orders -None

Basis for adjustment -None

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50% Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

s		Cost Element		Skill		Department	Curve	Ouantity	Units
	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	127.03	Hours
Fa	ictors	142.84 h							
							0.88934 [SYS 06140	01 .88934200 - \$	System
	750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	95.28	Hours
Fa	ictors	107.13 h							
_						T	0.88934 [SYS 06140	01 .88934200 - Ş	Svstem
	750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	14.54	Hours
Fa	ictors	16.35 h							
							0.88934 [SYS 06140	01 .88934200 - \$	Svstem
	751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.35	Hours
Fa	ictors	7.14 h							
_							0.88934 [SYS 06140	01 .88934200 - \$	Svstem
	751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	4.77	Hours
Fa	ictors	5.36 h							
							0.88934 [SYS 06140		
	751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.73	Hours
Fa	ictors	0.82 h							
_						T	0.88934 [SYS 06140	0 <u>] .88934200 - Ş</u>	System
L	A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	942.20	Dollars
Fa	ictors	1043.78 d		1.015 FY00 Escalation					

Line Item 3a - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 144 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$95.35 average in this cluster

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter

Filter 1EFB

Baseline Devl

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 74% of the FY 99

budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficency return.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50% Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

s		Cost Element		Skill		Department	Curve	Quantity	Units
	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	178.56	Hours
Fa	ctors	200.78 h							
							0.88934 [SYS 06140	01 .88934200 - \$	Svstem
	750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	133.93	Hours
Fa	ctors	150.59 h							
_			1				0.88934 [SYS 06140	01 .88934200 - \$	Svstem
	750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	20.44	Hours
Fa	ctors	22.98 h							
_			1				0.88934 [SYS 06140	01 .88934200 - \$	Svstem
	751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	8.93	Hours
Fa	ctors	10.04 h							
		1				T	0.88934 [SYS 06140	01 .88934200 - \$	Svstem
	751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	6.70	Hours
Fa	ctors	7.53 h							
_		1				T	0.88934 [SYS 06140	01 .88934200 - \$	Svstem
	751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.02	Hours
Fa	ctors	1.15 h							
		1				T	0.88934 [SYS 06140	01 .88934200 - \$	Svstem
1	A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	1.324.38	Dollars
Fa	ctors	1467.16 d		1.015 FY00 Escalation					

Line Item 3c - Preventive maintenance

0.88934 [SYS 061400] .88934200 - System

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average

number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 18 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$30.28 average in this cluster Adjustment factor - FY99 is used as a base year. FY00 thru 05 are equal to FY99 scope

Revised number of work orders - No Change

Basis for adjustment - Directed targets.

The percentage of maintenance effort (labor Type) required is as follows:

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Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filter

Baseline Devl 1EFB

Curve

Starts In FY

Units

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%

Cost Element

Pipefitter 12.50%

1EFB10

1EXXXB0310

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

WBS No:

Activity ID:

750 STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	7.08 Hours
Factors 7.96 h						
					0.88934 [SYS 061400	01 .88934200 - Svstem
750 STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	5.31 Hours
Factors 5.97 h						
					0.88934 [SYS 061400	01 .88934200 - Svstem
750 STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.81 Hours
Factors 0.91 h						
					0.88934 [SYS 061400	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	1	ELECTRICIANS	1	Indust/Site Srys Steelworkers	Linear	0.36 Hours

751 OVERTIME BASE & PRE.	L C020 TELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	0.36lHours
Factors 0.4 h				
			0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Ext	KE10H Indust/Site Srvs Steelworkers	Linear	0.27 Hours

Factors 0.3 h

0.88934 [SYS 061400] .88934200 - System

751 OVERTIME BASE & PRE. C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers Linear 0.04 Hours

Factors 0.05 h

A5C SUPPLIES 0000 NONE C210S Facilities Momt & Maintenance Linear 52.50 Dollars

Factors 58.16 d 1.015 -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - System

Line Item SYS - Contingency And Escalation

BOE

Resources

es	Cost Element		Skill		Department		Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	41,505,72	Dollars
ال ا	Factors	41505.7 Dollars							
ļ	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	16.980.01	Dollars

Factors 16980.0 Dollars

Activity ID: 1EXXXB0410 Description: Security Bldgs Cluster Landlord Functions, FY05

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
1	Corrective maintenance	0.87	each	HC	1.475	1.288	27.749	7.406	0	35.155	9.657	44.812
1c	Corrective maintenance	0.87	each	HC	82	72	1.546	413	0	1.959	538	2.497
3	Preventive maintenance	0.87	each	HC	249	217	4.760	823	0	5.583	1.657	7.239
3c	Preventive maintenance	0.87	each	HC	14	12	265	46	0	311	92	404
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	29.322	29.322	0	29.322
	To	tal for Activi	tv 1EXXXB0	410:		1.589	34.322	8.687	29.322	72.331	11.944	84.275

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 116 corrective/routine maintenance work actions are expected.

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1EFB10 Proiect **Rocky Flats Closure Project** 1EXXXB0410 **Baseline Cost and Basis of Estimate**

WBS Filter 1EFB Activity Filter

Baseline Devl

Curve

Starts In FY *

Units

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98 Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$488.44 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 thru 05 are expectred to require the same level of effort as FY99

Revised number of work orders -None

Basis for adjustment -None

The percentage of maintenance effort (labor Type) is as follows:

15.38% Carpenter

Electrician 30.77% (includes Linemen)

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

Stationary Operating Engineer 1.54%

Cost Element

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

WBS No:

Activity ID:

750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	63.52 Hours
Factors 71.42 h				
			0.88934 [SYS 06140	
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	103.22 Hours
Factors 116.06 h				
			0.88934 [SYS 06140	
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	95.28 Hours
Factors 107.13 h				.1
O	Laces Electricity	1/5/01/ 1 1/0/: 0 0/ 1 1	0.88934 [SYS 06140	
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	131.44 Hours
Factors 147.79 h			0.88934 [SYS 06140	01 00004000 Cyatam
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	U.88934 1515 06140	153.48 Hours
Factors 172.58 h	1 C020 IELECTRICIANS	NETOTI IIIdusi/Site Sivs Steelworkers	Lilleal	133.401110013
<i>Pacions</i> 172.30 II			0.88934 [SYS 06140	01 88934200 - System
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	137.63 Hours
Factors 154.75 h				
			0.88934 [SYS 06140	01 .88934200 - Svstem
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear	63.52 Hours
Factors 71.42 h				
			0.88934 [SYS 06140	01 .88934200 - Svstem
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear	52.93 Hours
Factors 59.52 h				
	1		0.88934 [SYS 06140	
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear	10.58 Hours
Factors 11.9 h				
	T I	T.,	0.88934 [SYS 06140	
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	108.50 Hours
Factors 122 h			0.00004 5000 00440	01 00004000 0 4
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 ISYS 06140	63.52 Hours
750 STRAIGHT TIME BASE Factors 71.42 h	I CU/U IPAINTERS	KETUH TIHUUSVOILE SIVS STEELWOFKEIS	Linear	03.52IHOUIS
ruciois / 1.42 11			0.00034 [CVC 06140	01 .88934200 - Svstem
			0.00334 1313 00140	01.00334200 - SVStell1

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Ba
WBS Filter 1E
Activity Filter *

Baseline Devl 1EFB

1EXXXB0410	Baseline Cost an	d Basis of Estimate	WBS Filter 1EFB Activity Filter *	Starts In FY *
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwe		218.81 Hours
Factors 246.04 h				
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwo		14001 .88934200 - Svstem 34.40 Hours
Factors 38.68 h	1 0000 II Editibello / 110 I II El II I Elli	TETOTI IIII GOVORO OTTO OLOOM		
	1			14001 .88934200 - Svstem
750 STRAIGHT TIME BASE Factors 47.61 h	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwe	orkers Linear	42.34 Hours
raciors 47.01 II			0.88934 [SYS 06	14001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL WORKE	KE10H Indust/Site Srvs Steelwo	orkers Linear	93.51 Hours
Factors 105.15 h			20 2721 - 12000 0	1.1001 0002.1200 Custom
750 STRAIGHT TIME BASE	R070 WASTE TREATMENT OPERATOR A	KE10H Indust/Site Srvs Steelwo		14001 .88934200 - Svstem 31.76 Hours
Factors 35.71 h				
754 OVEDTIME DAGE & DDE	COAO CARRENTERO	IVEAUL In durat/Oita Our of Otalahar		14001 .88934200 - Svstem
751 OVERTIME BASE & PRE. Factors 5.36 h	C010 CARPENTERS	KE10H Indust/Site Srvs Steelwe	orkers Linear	4.77 Hours
3.00			0.88934 ISYS 06	14001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelwe	orkers Linear	5.16 Hours
Factors 5.8 h			0.00024 [52/5]	1 1001 0002 1200 Cyatam
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelwo		14001 .88934200 - Svstem 3.17 Hours
Factors 3.57 h				
	T I			1400] .88934200 - System
751 OVERTIME BASE & PRE. Factors 7.39 h	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwe	orkers Linear	6.57 Hours
Puctors 7.39 II			0.88934 [SYS 06	1400] .88934200 - System
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwe		6.88 Hours
Factors 7.74 h			0.00004 10000	4.4001.00004000
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwo		1400] .88934200 - System 7.68 Hours
Factors 8.63 h	1 VVEV INCLUSION INCLUSION	TIE TOTT THINGS ON STATE STORY		7.001110410
				14001 .88934200 - Svstem
751 OVERTIME BASE & PRE. Factors 3.57 h	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelwe	orkers Linear	3.17 Hours
Factors 3.57 h			0.88934 [SYS 06	14001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelwo	orkers Linear	0.53 Hours
Factors 0.6 h				
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Says Stocker	0.88934 ISYS 06 orkers Linear	14001 .88934200 - Svstem 2.65 Hours
Factors 2.98 h	1 CO40 IIVIAINTENANCE MACHINIST (IIIC EXD	NETOTI IIIdust/Site Sivs Steeliki	Jineis Lilieai	2.051110015
			0.88934 [SYS 06	14001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelwe	orkers Linear	3.17 Hours
Factors 3.57 h			an 9V91 NSD88 N	14001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelwo		5.42 Hours
Factors 6.1 h				
754 OVERTIME DAGE 0 555	Occor DI LIMPEDO AND DIDEFITTEDO	1/E4011 1 1/0': 0 0: 1		14001 .88934200 - System
751 OVERTIME BASE & PRE. Factors 1.93 h	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwe	orkers Linear	1.72 Hours
. 1.30 11				1400] .88934200 - System

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1FFB10 WBS No: Activity ID:

Dealer Clate Oleanne Deale of

Baseline Devl Project

1EXXX	(B0410			Rockv Flats Baseline Cost ar			WBS Filter Activity Filter	1EFB	C.	tarts In FY	*
751	OVERTIME BASE & F	PRE. C080	PLUMBERS AN	D PIPEFITTERS	KE10H	Indust/Site Srvs Steelworker		Linear	31	2.12 H	ours
Factors	2.38 h							0.88934_[S [^]	YS 0614001 .88	934200 - Sv	/stem
751	OVERTIME BASE & F	PRE. C080	PLUMBERS AN	D PIPEFITTERS	KE10H	Indust/Site Srvs Steelworker	S	Linear		10.94 H	ours
Factors	12.3 h							0.88934 [S	YS 0614001 .88	.934200 - Sv	/stem
751	OVERTIME BASE & F	PRE. C090	STRUCTURAL	AND METAL WORKE	KE10H	Indust/Site Srvs Steelworker	S	Linear		4.68 Ho	ours
Factors	5.26 h							0.88934 [S	YS 0614001 .88	.934200 - Sv	/stem
751	OVERTIME BASE & F	RE. R070	WASTE TREAT	MENT OPERATOR A	KE10H	Indust/Site Srvs Steelworker	S	Linear		1.59 H	ours
Factors	1.79 h				I			0.88934 [S	YS 0614001 .88	934200 - Sv	/stem
A5C	SUPPLIES	0000	NONE		C210S	Facilities Mamt & Maintenan	ce	Linear		8.479.82 Do	ollars
Factors - Correct	9394.03 d		1.015 FY	'00 Escalation				0.88934 [S	YS 061400] .88	934200 - Sv	rstem
predic the re backlo The pr	table, as such a sources necessary g, and projected coposal value was	model was generated to perform mainter work load. These i then modeled to each	d and used to nance activiti items were the ch cluster bas	estimate the budg es is: A review of basis from which sed on the number	etary r f the a RFCSS of main	, plan, operate, and requirements of this are ctual costs accrued du proposed, negotiated, attendance actions associations actions	nd all RFCSS uring FY 98, and was awar iated with t	managed clust RFCSS planned ded the Site that cluster in	ters. The b d maintenan maintenance n FY98, and	asis of exceptions of contract the proper	stimate mance, KH80009

Line Item 1c -

BOE

e for 099. alue was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 16 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$209.25 average for this cluster

Adjustment factor - FY99 is used as a base year. FY00 thru 05 are equal to FY99 scope

Revised number of work orders - No Change Basis for adjustment - Directed targets.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 30.77% (includes Linemen)

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

s		Cost Element		Skill		Department	Curve	Quantity	Units
	750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.75	Hours
	Factors	6.47 h							
							0.88934 [SYS 06140	0] .88934200 - 3	System
	750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.31	Hours
	Factors	5.97 h							
							0.88934 [SYS 06140	0] .88934200 - 3	System
	750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.54	Hours
	Factors	3.98 h							
							0.88934 [SYS 06140	01 88934200 - 9	System

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Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filter

Baseline Devl 1EFB

	Baseline Co	OST AND BASIS OF ESTIMATE Activity File	ter * Starts In FY *
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 8.56 Hours
Factors 9.62 h			
			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 7.33 Hours
Factors 8.24 h			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	U.00934 13 13 06 14001 .00934200 - 3Vsterii Linear 7.67 Hours
Factors 8.62 h	1 JOES IEEESTINON WO	THE TOTAL HIMMONOROUS OFFI CONSTRUCTION	
			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (inc	Exp KE10H Indust/Site Srvs Steelworkers	Linear 0.59 Hours
Factors 0.66 h			
750 OTDAIGUIT TIME DAGE	COAO MAINITENIANICE MACHINICE (in-	1 F VF4011 Indust/Oits On a Otsaharadana	0.88934
750 STRAIGHT TIME BASE Factors 3.98 h	1 C040 IMAINTENANCE MACHINIST (Inc	ELEXID KE10H Indust/Site Srvs Steelworkers	Linear 3.54 Hours
<i>ructors</i> 3.90 II			0.88934 [SYS 0614001.88934200 - Svstem
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (inc	EXECUTED KE10H Indust/Site Srvs Steelworkers	Linear 2.95 Hours
Factors 3.32 h			
			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear 3.54 Hours
Factors 3.98 h			0.00004 [0.00.400] 00004000 0
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	0.88934
Factors 6.8 h	1 COTO JI AIIVIEKO	TRETOTT IIIIdust/Oile Oilys Steelworkers	Linear 0.00ji louis
1 46.675			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear 1.92 Hours
Factors 2.16 h			
OTD 41011T THE DAGE	0000 011110000 1110 01000177700	VE1011 1 1/0': 0 0: 1 1	0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear 12.19 Hours
Factors 13.71 h			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear 2.36 Hours
Factors 2.65 h			
1			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL WO	RKE KE10H Indust/Site Srvs Steelworkers	Linear 5.21 Hours
Factors 5.86 h			0.00004 [0]/0.004400] 00004000 0
750 STRAIGHT TIME BASE	R070 WASTE TREATMENT OPERATO	OR A KE10H Indust/Site Srvs Steelworkers	0.88934
Factors 1.99 h	1 KO70 IWASIL IKLAHWENI OFEKAR	DN A NETOT IIIIdust/Site Sivs Steelworkers	Lineal 1.771110uts
1.00			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 0.18 Hours
Factors 0.2 h			
			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 0.28 Hours
Factors 0.32 h			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 13 13 06 14001 .88934200 - Svstern Linear 0.27 Hours
Factors 0.3 h	1 CO TO TOAK! LIVILING	TAL TOTAL IIII III III III III III III III III	Linear U.27 ii louis
			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 0.43 Hours
Factors 0.48 h			
			0.88934 [SYS 061400] .88934200 - System

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Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Austrian Tile Baseline Devl 1EFB

			id basis of Estimate	Activity Filter *	Ste	arts In FY *
	TIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworke		Linear	0.36 Hours
actors 0.4	1 h			0.0003	34 [SYS 061400] .889	024200 System
751 OVER	TIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworke		Linear	0.38 Hours
actors 0.43		1 CO20 IEEECTRICIANS	I RETOIT IIIIdds//Site Sivs Steelworke	15	IIIeai	0.301110013
				0.8893	34 [SYS 061400] .889	934200 - Svstem
751 OVER	TIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworke	rs	Linear	0.03 Hours
actors 0.03	3 h					
754 0\/50	TIME DAGE & DDE	0040 14411175144105 14401111107 (* 1.5	1/5/011 1 1/0" 0 0 1 1		34 [SYS 061400] .889	
751 OVER	TIME BASE & PRE. 7 h	C040 MAINTENANCE MACHINIST (incl Exp	KE10H IIndust/Site Srvs Steelworke	rs	Linear	0.15 Hours
actors 0.11	/ 11			0.8893	34 [SYS 061400] .889	934200 - System
751 OVER	TIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworke		Linear	0.18 Hours
actors 0.2	h					
					34 [SYS 0614001.889	
	TIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworke	rs	Linear	0.30 Hours
actors 0.34	4 h			0.0000	14 ICVC 0C4 4001 000	224200 Cyatam
751 OVER	TIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworke		34 [SYS 061400] .889 Linear	0.18 Hours
actors 0.2		1 OUTO II MINTENO	TILL TOTAL IIII GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG		incai	O. TOIL IOUIS
					34 [SYS 061400] .889	
	TIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworke	rs I	Linear	0.61 Hours
actors 0.69	9 h					
751 OVER	TIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworke		34 [SYS 061400] .889 Linear	934200 - System 0.10 Hours
$\frac{751}{actors}$ 0.1		CU80 PLUMBERS AND PIPEFITTERS	KETOH IIIIdusi/Sile Sivs Sieelworke	18	Inear	U. IUIHOUIS
0.1				0.8893	34 [SYS 061400] .889	934200 - Svstem
751 OVER	TIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworke		Linear	0.12 Hours
actors 0.13	3 h					
		T	I		34 [SYS 061400] .889	
	TIME BASE & PRE.	C090 STRUCTURAL AND METAL WORKE	KE10H Indust/Site Srvs Steelworke	rs	Linear	0.26 Hours
actors 0.29	9 h			0 0000	34 [SYS 061400] .889	034200 Systom
751 OVER	TIME BASE & PRE.	R070 WASTE TREATMENT OPERATOR A	KE10H Indust/Site Srys Steelworke		Linear	0.09 Hours
actors 0.1		THE THE PARTY OF T				0.001110410
				0.8893	34 [SYS 061400] .889	934200 - Svstem
A5C SUPP		0000 NONE	C210S Facilities Mamt & Maintenar	nce I	Linear	472.53 Dollars
Cactors 523	3.47 d	1.015 FY00 Escalation				
					4 [0]/0 004 4001 00/	204000 0 4

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned

maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

Approximately 82 preventative maintenance work actions are expected.

Data Source - Maintenance Management System and P&I Reporting System CPRs and Spending variance reports for FY98 Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance Units - Work Packages

Unit Cost - \$112.28 average

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0.88934 [SYS 061400] .88934200 - System

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filter

Filter 1EFB

Baseline Devl

Starts In FY

0.88934 [SYS 061400] .88934200 - System

Unit Adjustment factor - FY99 is used as a base year. FY00 thru 05 are expectred to require the same level of effort as FY99

Revised number of work orders -None

Basis for adjustment -None

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50% Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

1 015 -- FY00 Escalation --

Resources

s	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	127.03	Hours
Factors	142.84 h							
						0.88934 ISYS 06140	01 .88934200 - \$	System
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	95.28	Hours
Factors	107.13 h							
						0.88934 ISYS 06140	01 .88934200 - \$	System
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	14.54	Hours
Factors	16.35 h							
						0.88934 ISYS 06140	01 .88934200 - \$	System
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.35	Hours
Factors	7.14 h							
						0.88934 ISYS 06140	01 .88934200 - \$	System
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	4.77	Hours
Factors	5.36 h							
						0.88934 ISYS 06140	01 .88934200 - \$	System
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.73	Hours
Factors	0.82 h							
						0.88934 ISYS 06140	01 .88934200 - \$	System
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	942.20	Dollars

Line Item 3c - Preventive maintenance

Factors 1043 78 d

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 18 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98
Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$30.28 average in this cluster

Adjustment factor - FY99 is used as a base year. FY00 thru 05 are equal to FY99 scope

Revised number of work orders - No Change

Basis for adjustment - Directed targets.

The percentage of maintenance effort (labor Type) required is as follows:

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Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filter

Baseline Devl 1EFB

Curve

Starts In FY

Units

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%

Cost Element

Pipefitter 12.50%

1EFB10

1EXXXB0410

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

WBS No:

Activity ID:

750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	7.08 Hours
Factors	7.96 h						
						0.88934 [SYS 06140	01 .88934200 - Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	5.31 Hours
Factors	5.97 h						
						0.88934 [SYS 06140	01 .88934200 - Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.81 Hours
Factors	0.91 h						
						0.00004 [0)/0.00440	01 0000 4000 0 4
						0.88934 ISYS 06140	01 .88934200 - Svstem

Factors 0.4 h

0.88934 ISYS 0614001 .88934200 - System

751 OVERTIME BASE & PRE. C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srys Steelworkers Linear 0.27 Hours

Factors 0.3 h

A5C SUPPLIES 0000 NONE C210S Facilities Mgmt & Maintenance Linear 52.50 Dollars

Factors 58.16 d 1.015 -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - System

Line Item SYS - Contingency And Escalation

BOE

Resources

es		Cost Element		Skill		Department	Curve	Ouantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	20.809.16	Dollars
	Factors	20809.2 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	8.513.04	Dollars

Factors 8513.04 Dollars

WBS No: 1EFB1	1 Title: 125 Cluster Landlord										
Activity ID: 1EFE	Activity ID: 1EFB0435 Description: 125 Cluster Landlord Functions, FY00 Cost Risk 2 Schedule Risk 1										
Line Item	Description	Quantity Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
			Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
1	Corrective maintenance	1.00 each	HC	378	378	8.142	2.171	0	10.313	3.973	14.287
1a	Corrective maintenance	0.83 each	HC	553	459	9.885	2.963	0	12.848	4.824	17.672
3	Preventive maintenance	1.00 each	HC	64	64	1.395	241	0	1.637	681	2.318
3a	Preventive maintenance	0.83 each	HC	249	207	4.535	784	0	5.319	2.213	7.531
	Tot	al for Activity 1FFB0	435·		1 107	23 957	6 159	0	30 116	11 691	41 807

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 3 corrective/routine maintenance work actions are expected.

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Baseline Devl WBS Filter 1EFB Activity Filter *

Starts In FY

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$9104.66 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99

Basis for adjustment - None.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 32.31% (includes Linemen)

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

s	Cost Element	Skill	Department	Curve	Ouantity Units
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	24.39 Hours
Factors	48.71 h	0.3612 May 2000 Earned Value Fa	actor		
_				1.38645 [SYS 0613	001 1.386448 - Target
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	16.26 Hours
Factors	32.47 h	0.3612 May 2000 Earned Value Fa	actor		
	1			1.38645 [SYS 0613	001 1.386448 - Target
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	26.43 Hours
Factors	52.77 h	0.3612 May 2000 Earned Value Fa	actor		
_				1.38645 [SYS 0613	
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	35.24 Hours
Factors	70.36 h	0.3612 May 2000 Earned Value Fa	actor		
				1.38645 [SYS 0613	
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	33.65 Hours
Factors	67.2 h	0.3612 May 2000 Earned Value Fa	actor		
					001 1.386448 - Target
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	8.13 Hours
Factors	16.24 h	0.3612 May 2000 Earned Value Fa	actor		
	T	T I	T		001 1.386448 - Target
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	39.30 Hours
Factors	78.47 h	0.3612 May 2000 Earned Value Fa	actor		
	T	T I	T.,	1.38645 [SYS 0613	
750	STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp		Linear	2.71 Hours
Factors	5.41 h	0.3612 May 2000 Earned Value Fa	actor		
750	OTD A IOUT TIME DAGE	OO 40 MAINTENIANIOE MA OUINIOT (* . LE	1/54011 1 1 1/07 0 01 1 1	1.38645 ISYS 0613	
750	STRAIGHT TIME BASE		KE10H Indust/Site Srvs Steelworkers	Linear	13.55 Hours
Factors	27.06 h	0.3612 May 2000 Earned Value Fa	actor	1 00045 10040 0040	001 4 000 440 T
	070 440447 7445 0 4 0 5		VE1011 1 1 1/01: 0 0: 1 1	1.38645 [SYS 0613	
750	STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp		Linear	16.26 Hours
Factors	32.47 h	0.3612 May 2000 Earned Value Fa	actor	4 00045 1000 0040	0014 000440 T
750	STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srys Steelworkers		001 1.386448 - Target 27.78 Hours
750		0.3612 May 2000 Earned Value Fa		Linear	27.78 Hours
Factors	55.47 h	0.3012 Iviay 2000 Earned Value Fa	ACIOI	4 2004E 16V6 0642	0014 206449 Torrest
		· · · · · · · · · · · · · · · · · · ·	,	1.38645 [SYS 0613	001 1.366446 - Taluet

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Activity Filter

Baseline Devl 1EFB *

1EFB0	430	Baseline Cost and Basis of Estimate WBS Filt Activity I	
750	STRAIGHT TIME BASE	C070 PAINTERS KE10H Indust/Site Srvs Steelworkers	Linear 16.26 Hours
actors	32.47 h	0.3612 May 2000 Earned Value Factor	
750	OTD A IOUT TIME DAGE	COOL DILINDEDO AND DIDEFITTEDO (VELOU IL 1 VIO). O COL I	1.38645 [SYS 061300] 1.386448 - Target
750 actors	STRAIGHT TIME BASE 21.65 h	C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers 0.3612 May 2000 Earned Value Factor	Linear 10.84 Hours
aciors	21.05	0.3012 Ividy 2000 Earned Value Factor	1.38645 [SYS 061300] 1.386448 - Target
750	STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers	Linear 8.80/Hours
actors	17.58 h	0.3612 May 2000 Earned Value Factor	
			1.38645 [SYS 061300] 1.386448 - Target
750	STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers	Linear 56.02 Hours
actors	111.86 h	0.3612 May 2000 Earned Value Factor	1,38645 [SYS 061300] 1,386448 - Target
750	STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL WORKE KE10H Indust/Site Srvs Steelworkers	Linear 23.94 Hours
actors	47.81 h	0.3612 May 2000 Earned Value Factor	Elitodi 20.07ii lodis
	-		1.38645 [SYS 061300] 1.386448 - Target
	OVERTIME BASE & PRE.	C010 CARPENTERS KE10H Indust/Site Srvs Steelworkers	Linear 1.22 Hours
actors	2.44 h	0.3612 May 2000 Earned Value Factor	
751	OVEDTIME DAGE & DDE	C010 CARPENTERS KE10H Indust/Site Srvs Steelworkers	1.38645 ISYS 0613001 1.386448 - Target Linear 0.81 Hours
actors	OVERTIME BASE & PRE. 1.62 h	C010 CARPENTERS KE10H Indust/Site Srvs Steelworkers 0.3612 May 2000 Earned Value Factor	Linear 0.81 Hours
aciors	1.02 11	0.3012 Ividy 2000 Earned Value Factor	1.38645 [SYS 061300] 1.386448 - Target
751	OVERTIME BASE & PRE.	C010 CARPENTERS KE10H Indust/Site Srvs Steelworkers	Linear 1.32 Hours
actors	2.64 h	0.3612 May 2000 Earned Value Factor	
	I		1.38645 [SYS 061300] 1.386448 - Target
751	OVERTIME BASE & PRE.	C020 ELECTRICIANS KE10H Indust/Site Srvs Steelworkers	Linear 1.96 Hours
actors	3.92 h	0.3612 May 2000 Earned Value Factor	4 2004E ICVC 00420014 200440 Torret
751	OVERTIME BASE & PRE.	C020 ELECTRICIANS KE10H Indust/Site Srvs Steelworkers	1.38645 [SYS 061300] 1.386448 - Target Linear 1.68 Hours
actors	3.36 h	0.3612 May 2000 Earned Value Factor	Linear
			1.38645 [SYS 061300] 1.386448 - Target
751	OVERTIME BASE & PRE.	C020 ELECTRICIANS KE10H Indust/Site Srvs Steelworkers	Linear 0.41 Hours
actors	0.81 h	0.3612 May 2000 Earned Value Factor	
754	OVEDTIME DAGE & DDE	0000 ELECTRICIANO	1.38645 ISYS 0613001 1.386448 - Target
751 actors	OVERTIME BASE & PRE. 3.52 h	C020 ELECTRICIANS KE10H Indust/Site Srvs Steelworkers 0.3612 May 2000 Earned Value Factor	Linear 1.76lHours
actors	3.32	0.3012 IVIAY 2000 Earned Value Factor	1.38645 [SYS 061300] 1.386448 - Target
751	OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers	Linear 0.68 Hours
actors	1.35 h	0.3612 May 2000 Earned Value Factor	
	I		1.38645 [SYS 061300] 1.386448 - Target
751	OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers	Linear 0.81 Hours
actors	1.62 h	0.3612 May 2000 Earned Value Factor	4 00045
751	OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers	1.38645 [SYS 061300] 1.386448 - Target Linear 0.14 Hours
actors	0.27 h	0.3612 May 2000 Earned Value Factor	Lilledi 0.14IFIOUIS
uciors	0.27	0.0012 May 2000 Earned Value Factor	1.38645 [SYS 061300] 1.386448 - Target
751	OVERTIME BASE & PRE.	C070 PAINTERS KE10H Indust/Site Srvs Steelworkers	Linear 0.81 Hours
731	1.62 h	0.3612 May 2000 Earned Value Factor	
	1.02		
actors			1.38645 [SYS 061300] 1.386448 - Target
Factors	OVERTIME BASE & PRE.	C070 PAINTERS KE10H Indust/Site Srvs Steelworkers 0.3612 May 2000 Earned Value Factor	1.38645 [SYS 061300] 1.386448 - Target Linear 1.39 Hours

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Baseline Devl WBS Filter 1EFB

1.38645 [SYS 061300] 1.386448 - Target

	Baseline Cost ar	nd Basis of Estimate	Activity Filter *	Starts In FY *
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	s Linear	0.54 Hours
Factors 1.08 h	0.3612 May 2000 Earned Value Fa	ctor		
			1.38645 [SYS 06130	01 1.386448 - Target
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	s Linear	0.44 Hours
Factors 0.88 h	0.3612 May 2000 Earned Value Fa	ctor		
			1.38645 [SYS 06130	01 1.386448 - Target
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	s Linear	2.80 Hours
Factors 5.59 h	0.3612 May 2000 Earned Value Fa	ctor		
			1.38645 [SYS 06130	01 1.386448 - Target
751 OVERTIME BASE & PRE.	C090 STRUCTURAL AND METAL WORKE	KE10H Indust/Site Srvs Steelworkers	s Linear	1.20 Hours
Factors 2.39 h	0.3612 May 2000 Earned Value Fa	ctor		
			1.38645 [SYS 06130	01 1.386448 - Target
A5C SUPPLIES	0000 NONE	C210S Facilities Mgmt & Maintenand	ce Linear	2.170.96 Dollars
Factors 4271.05 d	1.015 FY00 Escalation	0.3612 May 2000 Earned	Value Factor	

Line Item 1a - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 214 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$499.77 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 83% of the FY 99

budget per FCP 1999-8064 Basis for adjustment - FCP 1999-8064 funding efficency return.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 32.31% (includes Linemen)

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

s	Cost Element		Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	26.74	Hours
Factors	53.4 h		0.3612 May 2000 Earned Value Fac	etor			
					1.38645 [SYS 06130	01 1.386448 - Ta	arget
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	40.11	Hours
Factors	80.1 h		0.3612 May 2000 Earned Value Fac	etor			
					1.38645 [SYS 06130	01 1.386448 - Ta	arget
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	43.46	Hours
Factors	86.78 h		0.3612 May 2000 Earned Value Fac	etor			
					1.38645 [SYS 06130	01 1.386448 - Ta	araet

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Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Baseline Devl WBS Filter 1EFB Activity Filter *

1EFB0435	Baseline Co	st and Basis of Estimate	WBS Filter 1EFB Activity Filter *	Starts In FY *
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworke		55.34 Hours
Factors 110.51 h	0.3612 May 2000 Earned Valu		•	•
				13001 1.386448 - Target
750 STRAIGHT TIME BASE Factors 115.7 h	C020 ELECTRICIANS 0.3612 May 2000 Earned Valu	KE10H Indust/Site Srvs Steelworke	ers Linear	57.94 Hours
ractors 115.7 II	0.3012 IMAY 2000 Earned Valu	de Factoi	1.38645 [SYS.061	13001 1.386448 - Target
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworke		52.00 Hours
Factors 103.84 h	0.3612 May 2000 Earned Value	ue Factor		
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	IXEAOLL III durat/Oita On a Otalah washa		13001 1.386448 - Target 13.37 Hours
Factors 26.7 h	0.3612 May 2000 Earned Valu	KE10H Indust/Site Srvs Steelworke	ers Linear	13.3/IHOUIS
1 40.075 20.1	0.5612 May 2505 Earned Valv	30 1 40101	1.38645 [SYS 061	13001 1.386448 - Target
750 STRAIGHT TIME BASE		Exp KE10H Indust/Site Srvs Steelworke		26.74 Hours
Factors 53.4 h	0.3612 May 2000 Earned Value	ue Factor		
750 STRAIGHT TIME BASE	CO40 MAINTENANCE MACHINIST (inc	Exp KE10H Indust/Site Srvs Steelworke		13001 1.386448 - Target 4.46 Hours
Factors 8.9 h	0.3612 May 2000 Earned Value		TIS LINEAL	4.401110015
			1.38645 [SYS 061	13001 1.386448 - Target
750 STRAIGHT TIME BASE		Exp KE10H Indust/Site Srvs Steelworke	ers Linear	22.28 Hours
Factors 44.5 h	0.3612 May 2000 Earned Value	ue Factor	4 000 45 100 40 004	10001 4 000440 T
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworke	1.38645 ISYS 061	13001 1.386448 - Target 45.68 Hours
Factors 91.22 h	0.3612 May 2000 Earned Valu		ZIO EINOGI	<u> </u>
				1300] 1.386448 - Target
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworke	ers Linear	26.74 Hours
Factors 53.4 h	0.3612 May 2000 Earned Valu	ue Factor	1 2064E ISVS 064	1300] 1.386448 - Target
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworke	ers Linear	50.06 Hours
Factors 99.96 h	0.3612 May 2000 Earned Value		no Emodi	00.00 110010
				1300] 1.386448 - Target
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworke	ers Linear	14.48 Hours
Factors 28.92 h	0.3612 May 2000 Earned Valu	ue Factor	1 39645 [SVS 061	13001 1.386448 - Target
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworke		17.83 Hours
Factors 35.6 h	0.3612 May 2000 Earned Valu			
				13001 1.386448 - Target
750 STRAIGHT TIME BASE	I C090 ISTRUCTURAL AND METAL WO 0.3612 May 2000 Earned Valu	RKE KE10H Indust/Site Srvs Steelworke	ers Linear	25.91 Hours
Factors 51.74 h	0.3612 May 2000 Earned Vali	de Factor	1.38645 [SYS.061	13001 1.386448 - Target
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworke		2.00 Hours
Factors 4 h	0.3612 May 2000 Earned Value	ue Factor		
==4 QVEDTIME DAGE 0 DDE	0040 0400547500	1454011 1 1401 0 0 1		13001 1.386448 - Target
751 OVERTIME BASE & PRE. Factors 4.2 h	C010 CARPENTERS 0.3612 May 2000 Earned Valu	KE10H Indust/Site Srvs Steelworke	ers Linear	2.10 Hours
ruciois 4.2 II	0.3012 IMAY 2000 Earned Valu	ue i autui	1.38645 [SYS 061	13001 1.386448 - Target
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworke		1.34 Hours
Factors 2.67 h	0.3612 May 2000 Earned Value			
TEL OVERTIME DAGE & DDE	Occor ELECTRICITIES	1/54011 L 1 1/2% 2 2% 1 1	1.38645 ISYS 061	13001 1.386448 - Target
751 OVERTIME BASE & PRE. Factors 6.45 h	C020 ELECTRICIANS 0.3612 May 2000 Earned Valu	KE10H Indust/Site Srvs Steelworke	ers Linear	3.23 Hours
<i>Fuciors</i> 0.40 II	0.3012 IMAY 2000 Earned Valu	ue i aului	1.38645 [SYS 061	1300] 1.386448 - Target

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filter

Baseline Devl 1EFB

121 00400	Baseline Cost and Basis of Estimate Activity Filter	*	Starts In FY *
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS KE10H Indust/Site Srvs Steelworkers	Linear	2.89 Hours
Factors 5.78 h	0.3612 May 2000 Earned Value Factor		
		1.38645 [SYS 061	3001 1.386448 - Target
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS KE10H Indust/Site Srvs Steelworkers	Linear	2.77 Hours
Factors 5.53 h	0.3612 May 2000 Earned Value Factor		
			3001 1.386448 - Target
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS KE10H Indust/Site Srvs Steelworkers	Linear	0.67 Hours
Factors 1.34 h	0.3612 May 2000 Earned Value Factor	1 386/5 [SVS 061	3001 1.386448 - Target
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers	Linear	0.23 Hours
Factors 0.45 h	0.3612 May 2000 Earned Value Factor	Elitodi	
		1.38645 [SYS 061	3001 1.386448 - Target
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers	Linear	1.34 Hours
Factors 2.67 h	0.3612 May 2000 Earned Value Factor		
		1.38645 [SYS 061	3001 1.386448 - Target
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers	Linear	1.12 Hours
Factors 2.23 h	0.3612 May 2000 Earned Value Factor		
			3001 1.386448 - Target
751 OVERTIME BASE & PRE.	C070 PAINTERS KE10H Indust/Site Srvs Steelworkers	Linear	2.28 Hours
Factors 4.56 h	0.3612 May 2000 Earned Value Factor		
751 OVERTIME BASE & PRE.	C070 PAINTERS KE10H Indust/Site Srvs Steelworkers	1.38645 ISYS 061 Linear	3001 1.386448 - Target 1.34 Hours
Factors 2.67 h	0.3612 May 2000 Earned Value Factor	Linear	1.34 HOUIS
raciors 2.07 II	0.3012 Iway 2000 Lamet Value Factor	1 386/5 [SVS 061	3001 1.386448 - Target
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers	Linear	0.72 Hours
Factors 1.44 h	0.3612 May 2000 Earned Value Factor	Linoui	0.72 110010
	······································	1.38645 [SYS 061	300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers	Linear	4.61 Hours
Factors 9.2 h	0.3612 May 2000 Earned Value Factor		
		1.38645 [SYS 061	300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers	Linear	0.89 Hours
Factors 1.78 h	0.3612 May 2000 Earned Value Factor		
			3001 1.386448 - Target
751 OVERTIME BASE & PRE.	C090 STRUCTURAL AND METAL WORKE KE10H Indust/Site Srvs Steelworkers	Linear	1.97 Hours
Factors 3.93 h	0.3612 May 2000 Earned Value Factor		
A50 011DD11E0	0000 F 355 M 40 15		3001 1.386448 - Target
A5C SUPPLIES	0000 NONE C210S Facilities Momt & Maintenance	Linear	3.570.10 Dollars
<i>Factors</i> 7023.66 d	1.015 FY00 Escalation 0.3612 May 2000 Earned Value Factor		

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FF98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 6 preventative maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Data Source - MMS and P&I Reporting System SVAR for FY98 Item Desc - Fiscal Year Preventive Maintenance Breakdown of Data:

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1.38645 [SYS 061300] 1.386448 - Target

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WBS No: 1EFB11 1EFB0435 Activity ID:

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Activity Filter Baseline Devl 1EFB

Starts In FY

1.38645 [SYS 061300] 1.386448 - Target

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$740.17 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99

Basis for adjustment - None.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50% Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cont Floring	Skill	Dominion	Commen	Outputies Their
Cost Element		Department	Curve	Ouantity Units
750 STRAIGHT TIME BASE	C020 IELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	32.52lHours
Factors 64.94 h	0.3612 May 2000 Earned Value Fa	actor		
			1.38645 [SYS 0613	001 1.386448 - Target
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Ext	KE10H Indust/Site Srvs Steelworkers	Linear	24.39 Hours
Factors 48.71 h	0.3612 May 2000 Earned Value Fa	actor		
			1.38645 [SYS 0613	001 1.386448 - Target
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	3.72 Hours
Factors 7.43 h	0.3612 May 2000 Earned Value Fa	actor		
			1.38645 [SYS 0613	001 1.386448 - Target
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	1.63 Hours
Factors 3.25 h	0.3612 May 2000 Earned Value Fa	actor		
			1.38645 ISYS 0613	001 1.386448 - Target
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exc	KE10H Indust/Site Srvs Steelworkers	Linear	1.22 Hours
Factors 2.44 h	0.3612 May 2000 Earned Value Fa	actor		
			1.38645 [SYS 0613	001 1.386448 - Target
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	0.19 Hours
Factors 0.37 h	0.3612 May 2000 Earned Value Fa	actor		
			1.38645 ISYS 0613	001 1.386448 - Target
A5C SUPPLIES	0000 NONE	C210S Facilities Momt & Maintenance	Linear	241.22 Dollars
<i>Factors</i> 474.56 d	1.015 FY00 Escalation	0.3612 May 2000 Earned Value Factor		

Line Item 3a - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 303 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$57.39 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 83% of the FY 99 budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficency return.

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filter

Baseline Devl 1EFB

Starts In FY

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50% Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

				1			1
s	Cost Element		Skill		Department	Curve	Ouantity Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	127.34 Hours
Factors	254.29 h		0.3612 May 2000 Earned Value Fac	ctor			
						1.38645 [SYS 06130	001 1.386448 - Target
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	95.51 Hours
Factors	190.72 h		0.3612 May 2000 Earned Value Fac	ctor			
					T.	1.38645 [SYS 06130	001 1.386448 - Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	14.57 Hours
Factors	29.1 h		0.3612 May 2000 Earned Value Fac	ctor			
						1.38645 [SYS 06130	001 1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.36 Hours
Factors	12.71 h		0.3612 May 2000 Earned Value Fac	ctor			
						1.38645 [SYS 06130	001 1.386448 - Target
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	4.78 Hours
Factors	9.54 h		0.3612 May 2000 Earned Value Fac	ctor			
_						1.38645 [SYS 06130	001 1.386448 - Target
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.73 Hours
Factors	1.45 h		0.3612 May 2000 Earned Value Fac	ctor			
						1.38645 [SYS 06130	001 1.386448 - Target
A5C	SUPPLIES	0000	NONE	C210S	Facilities Momt & Maintenance	Linear	944.50 Dollars

A5C SUPPLIES 0000 NONE C210S Facilities Momt & Maintenance Line

Factors 1858.16 d 1.015 -- FY00 Escalation -- 0.3612 May 2000 Earned Value Factor

1.38645 [SYS 061300] 1.386448 - Target

Activity ID: 1EFB0440

Description: 125 Cluster Landlord Functions, FY01

Cost Risk 2 Schedule Risk

Line Item	Description	Quantity		BOE	Labor	Labor Hours		Materials/ Sub	0 2	Total Prime	Burden Cost	Total Cost
			T	Гуре	Hours/Unit	Total	Total	Cost	& Escalation	Cost	,	
1	Corrective maintenance	1.00 e	ach I	HC	670	670	14.445	3.855	0	18.301	6.890	25.191
1a	Corrective maintenance	0.83 e	ach I	HC	1.103	915	19.737	5.262	0	25.000	9.415	34.414
3	Preventive maintenance	1.00 e	ach I	HC	113	113	2.478	428	0	2.906	1.182	4.088
3b	Preventive maintenance	0.83 e	ach I	HC	186	154	3.382	585	0	3.967	1.613	5.580
SYS	Contingency And Escalation	1.00 e	a	EE	0	0	0	0	3.665	3.665	0	3.665
	Tot	al for Activity	1EFB0440:			1.853	40.043	10.131	3.665	53.838	19.100	72.939

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

 \cdot Approximately 3 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$9104.66 average for this cluster

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Activity Filter

Starts In FY *

Baseline Devl

1EFB

Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99 Basis for adjustment - None.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 30.77% (includes Linemen)

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

s		Cost Element	Skill	Department	Curve	<i>Ouantity</i>	Units
L	750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	43.32	Hours
	Factors	48.71 h					
Г		1			0.88934 [SYS 06140		
Ĺ	750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	28.88	Hours
	Factors	32.47 h					
Г		0TD 4 10 1 T T 1 4 F D 4 0 F	0040 04005117500	1/51011 1 1 1/01: 0 0: 1 1	0.88934 [SYS 06140		
L		STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	46.93	Hours
	Factors	52.77 h			0.00004 [6000.00440	01 00004000 0	S
Г	750	CTDAIGUIT TIME DAGE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 06140		
L		STRAIGHT TIME BASE	C020 IELECTRICIANS	KETUH IIndust/Site Srvs Steelworkers	Linear	62.57	Hours
	Factors	70.36 h			0.88934 [SYS 06140	ni 88934200 - S	System
ſ	750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	59.76	
L	Factors	67.2 h	OVED TELEDITION (140	TETOTI IIII MARKO SITO SITO SITO SITO SITO SITO SITO SIT	Liliodi	00.70	louio
	i deleto	07.2			0.88934 [SYS 06140	ni 88934200 - S	System
ſ	750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	69.79	
-	Factors	78.47 h		THE TOTAL INTERNATION OF THE PROPERTY OF THE P		001101	
					0.88934 [SYS 06140	01 .88934200 - S	System
	750	STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear		Hours
	Factors	5.41 h	•	•	•	•	
_					0.88934 [SYS 06140	01 .88934200 - S	System
	750	STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear	24.07	Hours
	Factors	27.06 h	·	•	·	•	·
_					0.88934 [SYS 06140	01 .88934200 - S	System
	750	STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear	28.88	Hours
	Factors	32.47 h					
-					0.88934 [SYS 06140	01 .88934200 - S	System
Ĺ	750	STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	49.33	Hours
	Factors	55.47 h					
F		_			0.88934 [SYS 06140	01 .88934200 - Ş	3vstem
Ĺ	750	STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	28.88	Hours
	Factors	32.47 h					
Œ		1			0.88934 [SYS 06140		
Ĺ	750	STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	19.25	Hours
	Factors	21.65 h					
Е		T		T	0.88934 [SYS 06140		
L	750	STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	15.63	Hours
	Factors	17.58 h					
-					0.88934 [SYS 06140	01 .88934200 - S	System

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 WBS No:
 1EFB11

 Activity ID:
 1EFB0440

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Ba
WBS Filter 1E
Activity Filter *

Baseline Devl 1EFB

1EFB0440	Baseline Cost a	nd Basis of Estimate	WBS Filter 1EFB Activity Filter *	Starts In FY *
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwork		99.48 Hours
Factors 111.86 h			0.00004 1575	004.4001 0002.4200 Cyctom
750 STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL WORKE	KE10H Indust/Site Srys Steelwork		0614001 .88934200 - Svstem 42.52 Hours
Factors 47.81 h				
750 STRAIGHT TIME BASE	R070 WASTE TREATMENT OPERATOR A	VE10H Indust/Site Save Steelwork		0614001 .88934200 - Svstem 14.44 Hours
Factors 16.24 h	1 RU/U IWASTE TREATMENT OFERATOR A	RETURNINGUS//Site SIVS SteelWork	ers Ellieai	14.44Inouis
		1		0614001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelwork	ers Linear	2.17 Hours
Factors 2.44 h			0.88934 ISYS (0614001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworks		1.44 Hours
Factors 1.62 h				
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelwork		0614001 .88934200 - Svstem 2.35 Hours
Factors 2.64 h	1 COTO TOANFENTENS	ALTOH IIIIdds//Site Sivs Steelwork	eis Lilleai	2.331110018
-				0614001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwork	ers Linear	3.49 Hours
Factors 3.92 h			0.88931 1.8898.0	0614001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworke		2.99 Hours
Factors 3.36 h				
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwork		061400] .88934200 - System 3.13 Hours
Factors 3.52 h	C020 JELECTRICIANS	RETURN IIIIdust/Site Sivs Steelwork	ers Lillear	3.13JH0uIS
			0.88934 [SYS (061400] .88934200 - System
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworke	ers Linear	1.20 Hours
Factors 1.35 h			2V21 NEBBR 0	061400] .88934200 - System
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelwork		1.44 Hours
Factors 1.62 h				
754 OVERTIME DAGE & DDE	C040 MAINTENANCE MACHINIST (incl Exp	I/E4011 In diret/Oite On a Ote chine du	0.88934 ISYS (0614001 .88934200 - Svstem 0.24 Hours
751 OVERTIME BASE & PRE. Factors 0.27 h	1 C040 IMAINTENANCE MACHINIST (Incl Exp	KETUH IIndust/Site Srvs Steelworki	ers Linear	U.24IHOUIS
0.27			0.88934 [SYS (0614001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelwork	ers Linear	2.46 Hours
Factors 2.77 h			0.888.31 15088.0	0614001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelwork		1.44 Hours
Factors 1.62 h				
==	0000 0000000000000000000000000000000000	1/5/01/1/1/1/05/10 0 0 1	0.88934 [SYS (0614001 .88934200 - Svstem 0.96 Hours
751 OVERTIME BASE & PRE. Factors 1.08 h	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwork	ers Linear	0.96IHours
1.00 11			0.88934 ISYS (0614001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwork	ers Linear	0.78 Hours
Factors 0.88 h			0.00024 50\/0	064.4001.0002.4000
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwork	ers Linear	0614001 .88934200 - Svstem 4.97 Hours
Factors 5.59 h	. SOOY II ENTITION THE THE THE TELL	THE TOTAL PROPERTY OF THE STREET	, Ellivai	1.07 11 10010
			0.88934 [SYS (061400] .88934200 - System

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Rocky Flats Closure Project Resoling Cost and Resis of Estimate

Proiect WBS Filter

Baseline Devl 1EFB

		Dascille Cost al	iu Dasis	of Estimate	Activity Filter	*	Starts In FY *
751 OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	S	Linear	2.13 Hours
Factors 2.39 h							
						0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	S	Linear	0.72 Hours
Factors 0.81 h							
						0.88934 [SYS 06140	01 .88934200 - Svstem
A5C SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenand	ce	Linear	3.855.40 Dollars
Factors 4271.05 d		1.015 FY00 Escalation					

Line Item 1a - Corrective maintenance

0.88934 [SYS 061400] .88934200 - System

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

Approximately 214 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$499.77 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 83% of the FY 99 budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficency return.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 32.31% (includes Linemen)

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

s	Cost Element		Skill		Department	Curve	Ouantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	47.49	Hours
Factors	53.4 h							
						0.88934 [SYS 06140	01.88934200 -	Svstem
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	77.18	Hours
Factors	86.78 h							
	1					0.88934 [SYS 06140	01 .88934200 -	Svstem
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	71.24	Hours
Factors	80.1 h							
			T			0.88934 ISYS 06140	01 .88934200 -	Svstem
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	102.90	Hours
Factors	115.7 h							
		ı	Τ			0.88934 ISYS 06140	01 .88934200 -	Svstem
750	STRAIGHT TIME BASE	C020	IELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	98.28	Hours
Factors	110.511 h							
-						0.88934 [SYS 06140	01 .88934200 -	Svstem

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Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Ba
WBS Filter 1E
Activity Filter *

Baseline Devl r 1EFB

1EFB0440	Baseline Co	et and Basis of Estimate	3S Filter 1EFB tivity Filter *	Starts In FY *
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	114.76 Hours
Factors 129.04 h				
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	0.88934 ISYS 06 Linear	14001 .88934200 - Svstem 23.75 Hours
Factors 26.7 h	1 CO20 IELECTRICIANS	RETURN IIII dust/Site Sivs Steelworkers	Lilledi	23.73ITIOUIS
			0.88934 ISYS 06	14001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (inc	Exp KE10H Indust/Site Srvs Steelworkers	Linear	39.58 Hours
Factors 44.5 h			0.00004 10000	44001 00004000 0
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (inc	Exp KE10H Indust/Site Srvs Steelworkers	0.88934 ISYS 06 Linear	14001 .88934200 - Svstem 47.49 Hours
Factors 53.4 h		LAD THE TOTAL IIII MAN ON OUT ON ON ON OUT		17.101110410
				14001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl	Exp KE10H Indust/Site Srvs Steelworkers	Linear	7.92 Hours
Factors 8.9 h			90 2751 PE088 U	14001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 1313 00 Linear	81.13 Hours
Factors 91.22 h				
				14001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	47.49 Hours
Factors 53.4 h			0.88934 ISYS.06	14001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	163.60 Hours
Factors 183.96 h				
TEO OTDAIGUE TIME DAGE	OCCO DI LIMPEDO AND DIDEFITTEDO	WE4011 1 1 1/0': 0 0: 1 1		1400] .88934200 - System
750 STRAIGHT TIME BASE Factors 35.6 h	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	31.66 Hours
Puctors 35.0 II			0.88934 [SYS 06	1400] .88934200 - System
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	25.72 Hours
Factors 28.92 h				
750 STRAIGHT TIME BASE	COOD STRUCTURAL AND METAL WO	RKE KE10H Indust/Site Srvs Steelworkers	0.88934 SYS 06 Linear	1400] .88934200 - System 69.92 Hours
Factors 78.62 h	1 C090 ISTRUCTURAL AND METAL WOL	RRE RETURN IIII dust/Site Sivs Steelworkers	Lilledi	09.921110015
			0.88934 ISYS 06	14001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	2.37 Hours
Factors 2.67 h			0.00034 16V6.00	44001 00024200 Cyclem
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 ISTS 06	14001 .88934200 - Svstem 3.86 Hours
Factors 4.34 h	TOTAL ISSUED	THE TOTAL INTRODUCTION OF THE STATE OF THE S		0.001110410
				14001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	3.56 Hours
Factors 4 h			0 88934 1975 06	14001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	0.86934 1313 00 Linear	4.92 Hours
Factors 5.53 h		·		
	0000 51 5055:0:	1/5/01/1/1/20/ 5 5 5 5		14001 .88934200 - System
751 OVERTIME BASE & PRE. Factors 5.78 h	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	5.14 Hours
ruciors 3.70 II			0.88934 ISYS 06	14001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	5.74 Hours
Factors 6.45 h				
			0.88934 [SYS 06	1400] .88934200 - System

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl 1EFB

		Daseilli	e Cost and Basis	Activity F	ilter *	Starts In FY *
751	OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.19 Hours
Factors	1.34 h					
					0.88934 [SYS 061400	01 .88934200 - Svstem
751	OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIS	T (incl Exp KE10H	Indust/Site Srvs Steelworkers	Linear	0.40 Hours
Factors	0.45 h					
	1			I	0.88934 ISYS 061400	
751	OVERTIME BASE & PRE.	L C040 MAINTENANCE MACHINIS	T (incl Exp KE10H	Indust/Site Srvs Steelworkers	Linear	2.37 Hours
Factors	2.67 h					
	T	T I			0.88934 [SYS 061400	
751	OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIS	[(incl Exp KE10H	Indust/Site Srvs Steelworkers	Linear	1.98lHours
Factors	2.23 h				0.00004 [0.000.004.404	21 00004000 0
751	OVERTIME BASE & PRE.	C070 PAINTERS	VE4011	Indust/Site Srvs Steelworkers	0.88934 [SYS 061400 Linear	2.37 Hours
Factors	2.67 h	1 CO70 IPAINTERS	KETUH	illidusi/Site Sivs Steelworkers	Linear	2.3/1HOUIS
ruciors	2.07				0.88934 [SYS 061400	11 8803/200 - Svetom
751	OVERTIME BASE & PRE.	C070 PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.06 Hours
Factors	4.56 h	1 OUT O II MINTERO	11151011	IIII GGOVORO OTVO OLOGIWOTIOTO		1.001110010
					0.88934 [SYS 061400	01 .88934200 - Svstem
751	OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITT	ERS KE10H	Indust/Site Srvs Steelworkers	Linear	8.18 Hours
Factors	9.2 h					
					0.88934 [SYS 061400	
751	OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITT	ERS KE10H	Indust/Site Srvs Steelworkers	Linear	1.58 Hours
Factors	1.78 h					
	1	1		I	0.88934 [SYS 061400	
751	OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITT	ERS KE10H	Indust/Site Srvs Steelworkers	Linear	1.28 Hours
Factors	1.44 h					
754	OVERTIME BASE & BRE	OCCO OTRUCTURAL AND METAL	WORKE KEASH	1 1 1/0" 0 0 1 1	0.88934 [SYS 061400	
751	OVERTIME BASE & PRE.	C090 STRUCTURAL AND METAL	WORKE KE10H	Indust/Site Srvs Steelworkers	Linear	3.50 Hours
Factors	3.93 h				0.88934 [SYS 061400	01 00024200 System
A5C	SUPPLIES	0000 NONE	C210S	Facilities Mgmt & Maintenance	0.88934 1515 061400 Linear	6.340.30 Dollars
Factors	7023.84 d	1.015 FY00 Escalation		ii aciiiles Muitit & Mailiterialice	Lilical	0.340.301D01ld15
1 4010/3	, 020.07 u	1.010 1 100 Escalatio	,,,		0.88934 [SYS 061400	01 .88934200 - System

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 6 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$740.17 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99 Basis for adjustment - None.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filter

Baseline Devl 1EFB

0.88934 [SYS 061400] .88934200 - System

Starts In FY

Maint. Mech 37.50% Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

-- FY00 Escalation --

Resources

S	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	57.75	Hours
Factors	64.94 h							
	·					0.88934 [SYS 06140	01 .88934200 - 3	Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	43.32	Hours
Factors	48.71 h							
						0.88934 [SYS 06140	01 .88934200 - 3	Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.61	Hours
Factors	7.43 h							
						0.88934 [SYS 06140	01 .88934200 - 3	Svstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.89	Hours
Factors	3.25 h							
						0.88934 [SYS 06140	01 .88934200 - 3	Svstem
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	2.17	Hours
Factors	2.44 h							
						0.88934 [SYS 06140	01 .88934200 - 3	Svstem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.33	Hours
Factors	0.37 h							
						0.88934 [SYS 06140	01 .88934200 - 3	Svstem
A5C	SUPPLIES	0000	NONE	C210S	Facilities Momt & Maintenance	Linear	428.38	Dollars

Line Item 3b - Preventive maintenance

Factors 474.56 d

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 303 preventative maintenance work actions are expected.

1.015

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$57.39 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 83% of the FY 99

budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficency return.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50% Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

 Resources
 Cost Element
 Skill
 Department
 Curve
 Quantity
 Units

Rocky Flats Closure Project Rasalina Cost and Rasis of Estimate

Proiect WBS Filter Baseline Devl 1EFB

		baseline Cost an	u basis	Activity Fi	lter *	Starts In FY *
750 STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	94.98 Hours
Factors 106.8 h						
	ı				0.88934 [SYS 061400	1.88934200 - Svstem
750 STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	71.24 Hours
Factors 80.1 h						
	ı				0.88934 [SYS 061400	1.88934200 - Svstem
750 STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	10.87 Hours
Factors 12.22 h						
					0.88934 [SYS 061400	1.88934200 - Svstem
751 OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.75 Hours
Factors 5.34 h						
	1	T			0.88934 [SYS 061400	1.88934200 - Svstem
751 OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	3.56 Hours
Factors 4 h						
	1	T			0.88934 [SYS 061400	1.88934200 - Svstem
751 OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.54 Hours
Factors 0.61 h						
					0.88934 [SYS 061400	1.88934200 - Svstem
A5C SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	704.48 Dollars
<i>Factors</i> 780.43 d		1.015 FY00 Escalation				

Line Item SYS - Contingency And Escalation

BOE

Resources

es		Cost Element		Skill		Department	Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	2.207.94	Dollars
F	actors	2207.94 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	1.456.68	Dollars
F	actors	1456.68 Dollars							

Activity ID: 1EFB0445 Description: 125 Cluster Landlord Functions, FY02

Cost Risk 2 Schedule Risk

0.88934 [SYS 061400] .88934200 - System

Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
1	Corrective maintenance	1.00	each	HC	670	670	14.445	3.855	0	18.301	5.099	23.400
3	Preventive maintenance	1.00	each	HC	113	113	2.478	428	0	2.906	875	3.781
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	4.052	4.052	0	4.052
	Total for Activity 1EFB0445:						16.924	4.284	4.052	25.259	5.974	31.233

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 3 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$9104.66 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99 Basis for adjustment - None.

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1EFB11 Rockv Flats Closure Project
1EFB0445 Baseline Cost and Basis of Estimate

Proiect Baseline Devl WBS Filter 1EFB

Baseline Cost and Basis of Estimate

Activity Filter * Starts In FY *

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 30.77% (includes Linemen)

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Res	οι	ır	ce	S
Res	οι	ıre	ce	S

WBS No:

Activity ID:

s	Cost Element	Skill		Department	Curve	Ouantity Units
	750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	43.32 Hours
Fa	<i>actors</i> 48.71 h					
				T		01 .88934200 - Svstem
	750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	28.88 Hours
Fo	actors 32.47 h				0.00004 [0)/0.00440	01 00004000 0 4
	750 STRAIGHT TIME BASE	C010 CARPENTERS	VE10U	Indust/Site Srvs Steelworkers	0.88934 15 Y 5 06 14 0	01 .88934200 - Svstem 46.93 Hours
	actors 52.77 h	CUIU ICARPENTERS	KETUH	Illidusi/Site Sivs Steelworkers	Lilleal	40.93ITIOUIS
1.0	actors 32.11 II				0.88934 ISYS 06140	01 .88934200 - Svstem
	750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	62.57 Hours
Fo	actors 70.36 h					
					0.88934 [SYS 06140	01 .88934200 - Svstem
	750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	59.76 Hours
Fa	actors 67.2 h					
				I		01 .88934200 - Svstem
	750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	69.79 Hours
FC	actors 78.47 h				0.80034 [676.06140	01 .88934200 - Svstem
	750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Style Steelworkers	0.66934 1313 06140 Linear	4.81 Hours
	actors 5.41 h	CO-TO INVAINTENANCE MACHINIST MICE EXD	111111111111111111111111111111111111111	illidus/Oile Oivs Oleelworkers	Lilleal	4.011110013
					0.88934 [SYS 06140	0] .88934200 - System
	750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	24.07 Hours
Fc	actors 27.06 h					
	1					0] .88934200 - System
_	750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	28.88 Hours
Fa	actors 32.47 h					.1 0
	750 STRAIGHT TIME BASE	C070 PAINTERS	KE4011	Indust/Site Srvs Steelworkers	0.88934 ISYS 06140 Linear	0] .88934200 - System 49.33 Hours
_	750	CU/U IPAINTERS	KETUH	indust/Site Sivs Steetworkers	Linear	49.33 HOUIS
1.0	11 11 11				0.88934 ISYS 06140	01 .88934200 - Svstem
	750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	28.88 Hours
Fo	actors 32.47 h					
					0.88934 [SYS 06140	01 .88934200 - Svstem
	750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	19.25 Hours
Fc	actors 21.65 h					
			1/5 / 01 1	1. 1. 1/01: 0. 0. 1. 1		01 .88934200 - Svstem
	750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	99.48 Hours
Fo	actors 111.86 h				0.88034 [676.06140	01 .88934200 - Svstem
	750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	0.86934 15 15 06 140 Linear	01.88934200 - System 15.63 Hours
	actors 17.58 h	1 Occording Consideration of the Constant of t	INE IVII	IIII GGOVORE OIVS OLEEIWOINEIS	Lilicai	10.001110015
					0.88934 [SYS 06140	01 .88934200 - Svstem

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filte

Baseline Devl 1EFB *

	Buccimic cost o	Activit	ty Filter * Sta	rts In FY *
750 STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL WORKE		Linear	42.52 Hours
Factors 47.81 h				
			0.88934 [SYS 061400] .889	
750 STRAIGHT TIME BASE	R070 WASTE TREATMENT OPERATOR A	KE10H Indust/Site Srvs Steelworkers	Linear	14.44 Hours
Factors 16.24 h			0.88934 [SYS 061400] .889	34200 - Syster
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	1.44 Hours
Factors 1.62 h				
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400] .889 Linear	34200 - Svster 2.17 Hours
Factors 2.44 h	1 COTO ICANFENTENS	RETOIT IIIIdust/Site Sivs Steetworkers	Lilleal	2.171110uis
2.11			0.88934 [SYS 061400] .889	34200 - Svster
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	2.35 Hour
Cactors 2.64 h				
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400] .889 Linear	34200 - Svster 3.49 Hours
Factors 3.92 h	C020 IELECTRICIANS	RETURN IIII MUSI/Site SIVS Steelworkers	Linear	3.49Inouis
0.02			0.88934 [SYS 061400] .889	34200 - Svster
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	2.99 Hours
Factors 3.36 h				
		T	0.88934 [SYS 061400] .889	
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	3.13 Hour
actors 3.52 h			0.88934 [SYS 061400] .889	24200 Synto
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Stys Steelworkers	0.66934 [513 061400] .669 Linear	1.20 Hour
Factors 1.35 h	1 00 10 110 1111 1111 1110 1111 1110 1111	TETOTI III dadyoko olivo okosiwo kolo	Elligai	1.20 110a10
			0.88934 [SYS 061400] .889	
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear	1.44 Hours
Factors 1.62 h			0.0004 1000 0044001 000	0.4000 0 4
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Ext	KE10H Indust/Site Strue Steelwerkers	0.88934 [SYS 061400] .889 Linear	0.24 Hours
Factors 0.27 h	1 CO40 IIVIAINTENANCE MACHINIST (IIICI EX	TRETOR IIIIdus//Site SIVS Steelworkers	Lilledi	U.24IHUUI:
0.27			0.88934 [SYS 061400] .889	34200 - Svstei
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	2.46 Hour
Factors 2.77 h				
			0.88934 [SYS 061400] .889	
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	1.44 Hour
factors 1.62 h			0.88934 [SYS 061400] .889	24200 Systo
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	U.86934 1313 0014001.869	0.96 Hours
Factors 1.08 h	TOOL II COMPENSATE IN ELITIFICATION			01001110011
			0.88934 [SYS 061400] .889	
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	0.78 Hour
actors 0.88 h				
ZEA OVERTIME BACE & BBE	COOO DI LIMPERO AND DIRECTTERO	I/E4011 Indust/Site Come Standard	0.88934 [SYS 0614001.889	34200 - Svste 4.97 Hour
751 OVERTIME BASE & PRE. Factors 5.59 h	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	4.9/IHour
-actors 5.59 II			0.88934 [SYS 061400] .889	34200 - System
751 OVERTIME BASE & PRE.	C090 STRUCTURAL AND METAL WORKE	KE10H Indust/Site Srvs Steelworkers	U.86934 1313 0014001.869	2.13 Hours
Factors 2.39 h				
			0.88934 [SYS 061400] .889	

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter

Baseline Devl 1EFB

							Activity Filter	*	Starts In FY *
751	OVERTIME BASE & PRE.	R070	WASTE T	REATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	6	Linear	0.72 Hours
Factors	0.81 h								
								0.88934 [SYS 06140	001 .88934200 - Svstem
A5C	SUPPLIES	0000	NONE		C210S	Facilities Mgmt & Maintenand	ce	Linear	3.855.40 Dollars
Factors	4271.05 d		1.015	FY00 Escalation					

Line Item 3 - Preventive maintenance

0.88934 [SYS 061400] .88934200 - System

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 6 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$740.17 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99 Basis for adjustment - None.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50% Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Ouantity Units
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	57.75 Hours
Factors 64.94 h				
			0.88934 [SYS 0614	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (in	cl Exp KE10H Indust/Site Srvs Steelworkers	Linear	43.32 Hours
Factors 48.71 h				
			0.88934 [SYS 0614	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	6.61 Hours
Factors 7.43 h				
			0.88934 [SYS 0614	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	2.89 Hours
Factors 3.25 h				
			0.88934 [SYS 0614	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (in	cl Exp KE10H Indust/Site Srvs Steelworkers	Linear	2.17 Hours
Factors 2.44 h				
			0.88934 [SYS 0614	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	0.33 Hours
Factors 0.37 h				
			0.88934 [SYS 0614	001 .88934200 - Svstem
A5C SUPPLIES	0000 NONE	C210S Facilities Mamt & Maintenance	Linear	428.38 Dollars
<i>Factors</i> 474.56 d	1.015 FY00 Escalation			
			0.88934 [SYS 0614	001 .88934200 - System

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Baseline Devl WBS Filter 1EFB Activity Filter *

Cost Pick

2 Schadula Pick

Starts In FY

Line Item SYS - Contingency And Escalation

BOE

Resources	Cost Element		Skill	Department	Curve	Quantity	Units
CO	N CONTINGENCY	0000	NONE	ZDEPT No Department	Linear	2.781.92	Dollars
Facto	ors 2781.92 Dollars						
ES	C ESCALATION	0000	NONE	ZDEPT No Department	Linear	1.270.22	Dollars
ES	C ESCALATION	0000	INONE	ZDEPT No Department	Linear	1.270.22	Dollars

Factors 1270.22 Dollars

ACTIVITY ID. 12-104-30 Description: 125 Cluster Landiold Functions, F105 Cost Risk 2 Schedule Risk 1												
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
1	Corrective maintenance	1.00	each	HC	670	670	14.445	3.855	0	18.301	4.998	23.299
1a	Corrective maintenance	0.83	each	HC	2.625	2.179	46.994	12.530	0	59.523	16.260	75.783
3	Preventive maintenance	1.00	each	HC	113	113	2.478	428	0	2.906	857	3.764
3a	Preventive maintenance	0.83	each	HC	443	367	8.053	1.392	0	9.445	2.786	12.231
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	31.825	31.825	0	31.825
Total for Activity 1EFB0450:			3.330	71.970	18.206	31.825	122.001	24.902	146.903			

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 3 corrective/routine maintenance work actions are expected.

arintian: 125 Cluster Landlard Functions EV03

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$9104.66 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99 Basis for adjustment - None.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 30.77% (includes Linemen)

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08%

32.47 h

Factors

Metal Worker 4.62% Stationary Operating Engineer 1.54%

Cost Element

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Skill

Resources

750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	46.93 Hours
Factors 52.77 h				
			0.88934 [SYS 06140	0] .88934200 - System
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	43.32 Hours
Factors 48.71 h				
			0.88934 [SYS 06140	01 .88934200 - Svstem
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	28.88 Hours

Department

0.88934 [SYS 061400] .88934200 - System

Curve

Ouantity

Units

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Ba
WBS Filter 1E
Activity Filter *

Baseline Devl 1EFB

Baselille Cost	and Basis of Estimate	Activity Filter *	Starts In FY *
C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers		69.79 Hours
CO20 ELECTRICIANS	KE10H Indust/Site Says Steelworkers		62.57 Hours
1 0020 ILLECTIVIDIANO	TRETOTT IIIIdus/Joile Sivs Steelworkers	Lilledi	02.571110013
			4001 .88934200 - Svsten
C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	s <u>L</u> inear	59.76 Hours
		0.88034 [SVS 0614	1001 99034200 Syston
C040 MAINTENANCE MACHINIST (incl Ex	xp KE10H Indust/Site Srvs Steelworkers	s Linear	24.07 Hours
			1001 .88934200 - Svsten
I C040 IMAINTENANCE MACHINIST (incl Ex	kp KE10H Indust/Site Srvs Steelworkers	s Linear	28.88 Hours
		0.88934 [SYS 0614	4001 .88934200 - Svsten
C040 MAINTENANCE MACHINIST (incl Ex	KE10H Indust/Site Srvs Steelworkers		4.81 Hours
COZO DAINTEDO	1/54011 la duat/Oita Cara Ota abusalasa		
I CO/O IPAINTERS	KE10H lindust/Site Srvs Steelworkers	s Linear	49.33 Hours
		0.88934 [SYS 0614	4001 .88934200 - Svsten
C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	s Linear	28.88 Hours
COOL DI LIMBERS AND DIDEFITTERS	VE10H Indust/Site Save Steelwarker		99.48 Hours
C000 PLOWBERS AND FIFEFILIERS	RETURN IIII UUSI/SILE SIVS SLEEIWOIKEIS	S Lilledi	99.40 HUUIS
		0.88934 [SYS 0614	400] .88934200 - Systen
C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	s Linear	15.63 Hours
		0.00004 100/0.004	400] 00004000 0 4
COSO PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Stys Steelworkers		19.25 Hours
1 COOC II LOWDENS AND HI LITTENS	TRETOTT IIIIdus/Joile Sivs Steelworkers	Lilledi	13.231110013
			4001 .88934200 - Svstem
C090 STRUCTURAL AND METAL WORK	E KE10H Indust/Site Srvs Steelworkers	s Linear	42.52 Hours
		0.99034 ISVS 0614	1001 99024200 System
R070 WASTE TREATMENT OPERATOR	A KF10H Indust/Site Srvs Steelworkers	0.86934 1313 0014	
			4001 .88934200 - Svsten
C010 ICARPENTERS	KE10H Indust/Site Srvs Steelworkers	s Linear	1.44 Hours
		0.88034 [SVS 0614	1001 8803/200 - System
C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers		2.35 Hours
			4001 .88934200 - System
I C010 ICARPENTERS	KE10H Indust/Site Srvs Steelworkers	s Linear	2.17 Hours
		0.88934 ISYS 0614	4001 .88934200 - Svsten
C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	s Linear	2.99 Hours
	C020 ELECTRICIANS C020 ELECTRICIANS C040 MAINTENANCE MACHINIST (incl Extended to the content of the content o	C020 ELECTRICIANS KE10H Indust/Site Srvs Steelworker C020 ELECTRICIANS KE10H Indust/Site Srvs Steelworker C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworker) C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworker) C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworker) C070 PAINTERS KE10H Indust/Site Srvs Steelworker) C070 PAINTERS KE10H Indust/Site Srvs Steelworker C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworker) C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworker C090 STRUCTURAL AND METAL WORKE KE10H Indust/Site Srvs Steelworker R070 WASTE TREATMENT OPERATOR A KE10H Indust/Site Srvs Steelworker C010 CARPENTERS KE10H Indust/Site Srvs Steelworker	C020 ELECTRICIANS

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl 1EFB

			Starts In FY *
C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	3.13 Hours
C020 IELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	3.49 Hours
		0.88934 [SYS 06140	001 .88934200 - Svstem
C040 MAINTENANCE MACHINIST (incl Ex	p KE10H Indust/Site Srvs Steelworkers	Linear	1.44 Hours
		0.88934 [SYS.06140	001 88934200 - System
C040 MAINTENANCE MACHINIST (incl Ex	p KE10H Indust/Site Srvs Steelworkers		0.24 Hours
C040 MAINTENANCE MACHINIST (incl Ex	p KE10H Indust/Site Srvs Steelworkers	Linear	1.20 Hours
		0.88934 [SYS 06140	001 .88934200 - System
C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	1.44 Hours
0000 0444000	VE1011 1 1 1/01: 0 0: 1 1		
I CO70 IPAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	2.46 Hours
		0.88034 [SVS 06140	001 8803/200 - System
C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srys Steelworkers		4.97 Hours
1 0000 JI EOMBERO / MAD THE ETTITERO	TRETOTT INIGGOVERS ON OTHER ORDER	Linear	1.07 110010
		0.88934 [SYS 06140	00] .88934200 - System
C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	0.96 Hours
		0.88934 [SYS 06140	00] .88934200 - System
C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	0.78 Hours
I C090 ISTRUCTURAL AND METAL WORKE	KE10H Indust/Site Srvs Steelworkers	Linear	2.13 Hours
		0.88934 [SYS 06140	001 .88934200 - System
R070 WASTE TREATMENT OPERATOR A	KE10H Indust/Site Srvs Steelworkers	Linear	0.72 Hours
		0.88934 [SYS 06140	001 .88934200 - Svstem
0000 NONE	C210S Facilities Mamt & Maintenance	Linear	3.855.40 Dollars
1.015 FY00 Escalation			
	C020 ELECTRICIANS C040 MAINTENANCE MACHINIST (incl Ex C040 MAINTENANCE MACHINIST (incl Ex C040 MAINTENANCE MACHINIST (incl Ex C070 PAINTERS C070 PAINTERS C080 PLUMBERS AND PIPEFITTERS C080 PLUMBERS AND PIPEFITTERS C080 PLUMBERS AND PIPEFITTERS C080 PLUMBERS AND PIPEFITTERS C090 STRUCTURAL AND METAL WORKER R070 WASTE TREATMENT OPERATOR A	C020 ELECTRICIANS KE10H Indust/Site Srvs Steelworkers C040 MAINTENANCE MACHINIST (incl Exp. KE10H Indust/Site Srvs Steelworkers C040 MAINTENANCE MACHINIST (incl Exp. KE10H Indust/Site Srvs Steelworkers C040 MAINTENANCE MACHINIST (incl Exp. KE10H Indust/Site Srvs Steelworkers C040 MAINTENANCE MACHINIST (incl Exp. KE10H Indust/Site Srvs Steelworkers C070 PAINTERS KE10H Indust/Site Srvs Steelworkers C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers C090 STRUCTURAL AND METAL WORKE KE10H Indust/Site Srvs Steelworkers R070 WASTE TREATMENT OPERATOR A KE10H Indust/Site Srvs Steelworkers	0.88934 ISYS 06140 Indust/Site Srvs Steelworkers 0.88934 ISYS 06140 Indust/Site Srvs Steelworkers 1.000 Indust/Site Srvs Steelworkers 1.0000 Indust/Site Srvs Steelworke

Line Item 1a - Corrective maintenance

0.88934 [SYS 061400] .88934200 - System

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 214 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$499.77 average for this cluster

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter

Baseline Devl 1EFB

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 83% of the FY 99

budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficency return.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 32.31% (includes Linemen)

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

s	Cost Element	Skill	Department	Curve	Ouantity Units
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	183.76 Hours
Factor	s 206.62 h				
				0.88934 [SYS 06140	
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	169.62 Hours
Factor	s 190.72 h				
				0.88934 [SYS 06140	
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	113.08 Hours
Factor	s 127.15 h				
				0.88934 [SYS 06140	
750		C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	233.99 Hours
Factor	s 263.11 h				
		T T		0.88934 [SYS 06140	
750		C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	273.23 Hours
Factor	s 307.23 h				
		T T		0.88934 [SYS 06140	
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	56.54 Hours
Factor	s 63.57 h				
		<u> </u>		0.88934 [SYS 06140	
750	•	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	245.00 Hours
Factor	s 275.48 h				
		<u> </u>		0.88934 [SYS 06140	
750	·	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear	94.23 Hours
Factor	s 105.95 h				
				0.88934 [SYS 06140	
750		C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear	18.85 Hours
Factor	s 21.19 h				
				0.88934 [SYS 06140	
750		C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear	113.08 Hours
Factor	s 127.15 h				
		T T	T	0.88934 [SYS 06140	
750		C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	193.16 Hours
Factor	s 217.19 h				
		T T	T	0.88934 [SYS 06140	
750		C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	113.08 Hours
Factor	s 127.15 h				
		T	T.,	0.88934 [SYS 06140	
750		C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	61.23 Hours
Factor	s 68.85 h				
				0.88934 [SYS 06140	01 .88934200 - Svstem

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 WBS No:
 1EFB11

 Activity ID:
 1EFB0450

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Ba
WBS Filter 1E
Activity Filter *

Baseline Devl 1EFB

1EFB0450	Baseline Cost ar	nd Basis of Estimate	WBS Filter 1EFB Activity Filter *	Starts In FY *
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworke		75.38 Hours
Factors 84.76 h			0.00004 [0]	0.004.4001.0000.4000
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworke		S 0614001 .88934200 - Svstem 389.54 Hours
Factors 438.01 h				
750 OTDAIOUT TIME DAGE	COOL CERUCTURAL AND METAL MODICE	KE40II Indust/Cita On a Ota shuada	0.88934 ISY	S 0614001 .88934200 - System 166.47 Hours
750 STRAIGHT TIME BASE Factors 187.18 h	C090 ISTRUCTURAL AND METAL WORKE	KE10H Indust/Site Srvs Steelworke	rs Linear	166.4/IHours
Tactors 101.10 II			0.88934 [SY	S 0614001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworke		8.48 Hours
Factors 9.54 h			V21 N2088 U	S 0614001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworke		5.66 Hours
Factors 6.36 h				
754 OVEDTIME DACE & DDE	COAO CARRENTERS	VEAGLE Indust/Site Save Steelwarks		S 0614001 .88934200 - System
751 OVERTIME BASE & PRE. Factors 10.33 h	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworke	rs Linear	9.19 Hours
			0.88934 [SY	S 0614001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworke	rs Linear	13.66 Hours
Factors 15.36 h			0.000.24	C 064 4001 0002 4200 Cyclem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworke		S 0614001 .88934200 - Svstem 11.70 Hours
Factors 13.16 h				
	T	T		S 061400] .88934200 - System
751 OVERTIME BASE & PRE. Factors 13.77 h	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworke	rs Linear	12.25 Hours
ractors 13.77 II			0.88934 [SY	S 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworke		2.83 Hours
Factors 3.18 h				
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Says Steelworks		S 061400] .88934200 - System 4.71 Hours
Factors 5.3 h	T C040 IMAINTENANCE MACHINIST THE EXD	TETOT IIIIdusi/Site Sivs Steelworke	Lilieai	4.7 111 10015
			0.88934 [SY	S 0614001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworke	rs Linear	5.66 Hours
Factors 6.36 h			V21 1/2088 0	S 0614001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srys Steelworke	rs Linear	0.94 Hours
Factors 1.06 h				
		T.,		S 0614001 .88934200 - System
751 OVERTIME BASE & PRE. Factors 10.86 h	C070 PAINTERS	KE10H Indust/Site Srvs Steelworke	rs Linear	9.66 Hours
raciors 10.00 II			0.88934 [SY	S 0614001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworke	rs Linear	5.66 Hours
Factors 6.36 h				
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworke	0.88934 [SY	S 0614001 .88934200 - System 3.06lHours
Factors 3.44 h	CUOU IPLUIVIDERS AIND PIPEFITTERS	VE IOU IIIdas/sife 21/8 2(66)MOLK6	is Linear	3.UDIHOUIS
			0.88934 [SY	S 0614001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworke	rs Linear	19.48 Hours
Factors 21.9 h			0.00004 500	C 004 4001 0000 4000 C:t
			U.88934 [SY	S 061400] .88934200 - System

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WBS No: 1EFB11 1EFB0450 Activity ID:

Rocky Flats Closure Project Recoling Cost and Resis of Estimate

Proiect WBS Filter

Baseline Devl 1EFB

		baseline Cost ai	iu basis	or Estimate	Activity Filter	*	Starts In FY *
751 OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers		Linear	3.77 Hours
Factors 4.24 h							
						0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers		Linear	8.32 Hours
Factors 9.36 h							
						0.88934 [SYS 06140	01 .88934200 - Svstem
A5C SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	е	Linear	15.095.94 Dollars
Factors 1.015 FY00 Escalation		16723.4 d					

Line Item 3 - Preventive maintenance

0.88934 [SYS 061400] .88934200 - System

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

Approximately 6 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98 Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$740.17 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99 Basis for adjustment - None.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50%

Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

s	Cost Element		Skill		Department	Curve	Ouantity Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	57.75 Hours
Factors	64.94 h						
						0.88934 [SYS 06140	001 .88934200 - Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	43.32 Hours
Factors	48.71 h						
						0.88934 [SYS 06140	001 .88934200 - Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.61 Hours
Factors	7.43 h						
						0.88934 [SYS 06140	001 .88934200 - Svstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.89 Hours
Factors	3.25 h						
						0.88934 [SYS 06140	001 .88934200 - Svstem
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	2.17 Hours
Factors	2.44 h						
						0.88934 [SYS 06140	001 .88934200 - Svstem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.33 Hours
Factors	0.37 h						
						0.88934 [SYS 06140	001 .88934200 - Svstem

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter

Baseline Devl 1EFB

> Starts In FY 428.38 Dollars Linear

A5C SUPPLIES 0000 NONE Factors 474.56 d 1.015 -- FY00 Escalation --

Line Item 3a - Preventive maintenance

0.88934 [SYS 061400] .88934200 - System

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

C210S Facilities Momt & Maintenance

·Approximately 303 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$57.39 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 83% of the FY 99

budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficency return.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50% Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

s	Cost Element	Skill			Department	Curve	Quantity	Units
75	50 STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	226.15	Hours
Fact	ors 254.29 h							
						0.88934 [SYS 06140	01 .88934200 - S	vstem
75	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	169.62 H	Hours
Fact	ors 190.72 h							
						0.88934 [SYS 06140	01 .88934200 - S	vstem
75	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	25.88 H	Hours
Fact	ors 29.1 h							
		,				0.88934 [SYS 06140	01 .88934200 - S	vstem
75	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	11.30 H	Hours
Fact	ors 12.71 h							
		,				0.88934 [SYS 06140	01 .88934200 - S	vstem
75	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	8.48 H	Hours
Fact	ors 9.54 h							
		ı				0.88934 [SYS 06140	01 .88934200 - S	vstem
75	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.29	Hours
Fact	ors 1.45 h							
		ı				0.88934 [SYS 06140	01 .88934200 - S	vstem
A5	C SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	1.677.33	Oollars
Fact	ors 1858.16 d		1.015 FY00 Escalation					
						0.88934 [SYS 06140	0] .88934200 - S	ystem

Line Item SYS - Contingency And Escalation

BOE

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
1EFB
Activity Filter
*

Activity ID: 1EFB0450 Baseline Cost and Basis of Estimate

es	Cost Element		Skill		Department	Curve	Ouantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	23.000.29	Dollars
Factor.	23000.3 Dollars							
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	8.824.75	Dollars

Factors 8824.75 Dollars

Activity ID: 1EF	Description: 125 Cluster Landlord Function	ons, FY04						Cost Risk	1 Schedule R	isk 1		
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
1	Corrective maintenance	1.00	each	HC	670	670	14.445	3.855	0	18.301	4.074	22.374
1a	Corrective maintenance	0.83	each	HC	2.625	2.179	46.994	12.530	0	59.523	13.252	72.776
3	Preventive maintenance	1.00	each	HC	113	113	2.478	428	0	2.906	699	3.605
3a	Preventive maintenance	0.83	each	HC	443	367	8.053	1.392	0	9.445	2.271	11.716
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	15.744	15.744	0	15.744
	Tot	al for Activi	ty 1EFB045	5:		3.330	71.970	18.206	15.744	105.920	20.296	126.215

Line Item 1 - Corrective maintenance

1EFB11

BOE

WBS No:

Resources

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 3 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$9104.66 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99 Basis for adjustment - None.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 30.77% (includes Linemen)

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08%

750 STRAIGHT TIME BASE

Metal Worker 4.62%

Stationary Operating Engineer 1.54%

Cost Element

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

C010 CARPENTERS

Resources

Factors 48.71 h			
			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 28.88 Hours
Factors 32.47 h			
			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 46.93 Hours

Department

KE10H Indust/Site Srvs Steelworkers

 Factors
 52.77 h

 0.88934
 [SYS 061400] .88934200 - System

Curve

Linear

Starts In FY

Ouantity

Units

43.32 Hours

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter

Baseline Devl 1EFB

	Daseline C	OST and Basis of Estimate Activity File	ter * Starts In FY *
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 62.57 Hours
Factors 70.36 h			
oth MOUT Till	0000 51505555555	1/5/01/ 1/ //01/ 5 5 5	0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 59.76lHours
Factors 67.2 h			0.88934 ISYS 0614001 .88934200 - System
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 69.79 Hours
Factors 78.47 h	TOTO TELESTIMON NO	THE TOTAL HIMMONOMO STAN SHOOMSTAN	<u> </u>
			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (in	cl Exp KE10H Indust/Site Srvs Steelworkers	Linear 4.81 Hours
Factors 5.41 h			
TEO OTDAIGUIT TIME DAGE	OO 40 MAINTENANOE MAQUINIOT (15 V540V V 1 V0' 0 0 1 V	0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE Factors 27.06 h	I C040 IMAINTENANCE MACHINIST (in	cl Exp KE10H Indust/Site Srvs Steelworkers	Linear 24.07 Hours
raciors 27.06 II			0.88934 ISYS 0614001 .88934200 - System
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (in	cl Exp KE10H Indust/Site Srvs Steelworkers	Linear 28.88 Hours
Factors 32.47 h			
			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear 49.33 Hours
Factors 55.47 h			
TEO OTDAIGUIT TIME DAGE	OOTO DANITEDO	1/E4011 1 1/0': 0 0: 1 1	0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE Factors 32.47 h	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear 28.88 Hours
ractors 32.47 II			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear 19.25 Hours
Factors 21.65 h			
			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear 99.48 Hours
Factors 111.86 h			
750 OTDAIOUT TIME DAGE	OCCO DI LIMBERO AND DIDEFITTERO) //E4011 1 1/0'/ 0 0/ 1 1	0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE Factors 17.58 h	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear 15.63 Hours
raciors 17:50 II			0.88934 [SYS 0614001.88934200 - Svstem
750 STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL WO	ORKE KE10H Indust/Site Srvs Steelworkers	Linear 42.52 Hours
Factors 47.81 h			
			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	R070 WASTE TREATMENT OPERAT	OR A KE10H Indust/Site Srvs Steelworkers	Linear 14.44 Hours
Factors 16.24 h			
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	0.88934
Factors 2.44 h	I CUTU ICARPENTERS	KETUH IIndust/Site Srvs Steelworkers	Linear Z.17IHours
raciois 2.44 II			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 1.44 Hours
Factors 1.62 h			
			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 2.35 Hours
Factors 2.64 h			
	0000 51505555555	1/5/01/ 1/ //01/ 5 5 5	0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 3.49lHours
Factors 3.92 h			0.00034 [CVC.064.400] 0.003.4000 0
			0.88934 [SYS 061400] .88934200 - System

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filter

Baseline Devl 1EFB

121 00400	Baseline Cost and	d Basis of Estimate	Activity Filter *	Starts In FY *
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworke		2.99 Hours
Factors 3.36 h				
				4001 .88934200 - System
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworke	rs Linear	3.13 Hours
Factors 3.52 h			0.888.97 1.888.0	4001 .88934200 - System
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworke		1.20 Hours
Factors 1.35 h				
				4001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworke	rs Linear	1.44 Hours
Factors 1.62 h			0.0004 101/0.004	4001 0000 4000 0 4
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Says Steelworks		4001 .88934200 - Svstem 0.24 Hours
Factors 0.27 h	1 C040 IIVIAINTENANCE IVIACI IINIST (IIICI EXD	ALTOT IIIIdusVSite SIVS Steelworke	Lilleal	0.2411 10015
			0.88934 [SYS 061	4001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworke	rs Linear	2.46 Hours
Factors 2.77 h				
754 0)/507/145 0405 4 005	C070 PAINTERS	VE1011 1 1/0': 0 0: 1 1		4001 .88934200 - Svstem
751 OVERTIME BASE & PRE. Factors 1.62 h	I CU/U IPAINTERS	KE10H Indust/Site Srvs Steelworke	rs Linear	1.44 Hours
raciors 1.02 II			0.88934 ISYS 061	4001 .88934200 - System
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworke		0.96 Hours
Factors 1.08 h				
				400] .88934200 - System
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworke	rs Linear	0.78 Hours
Factors 0.88 h			0.88834 [575.061	400] .88934200 - System
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworke		4.97 Hours
Factors 5.59 h				
				400] .88934200 - System
751 OVERTIME BASE & PRE.	C090 STRUCTURAL AND METAL WORKE	KE10H Indust/Site Srvs Steelworke	rs Linear	2.13 Hours
Factors 2.39 h			0.00004 10000.004	4001 00004000 0
751 OVERTIME BASE & PRE.	R070 WASTE TREATMENT OPERATOR A	KE10H Indust/Site Says Stochworks		4001 .88934200 - Svstem 0.72 Hours
Factors 0.81 h	TOTO INVASTE INCATINENT OF ENATOR A	TE TOTA III I GUSTOTIC OTVS STEETWOLKE	Lineal	0.721110015
				4001 .88934200 - Svstem
A5C SUPPLIES		C210S Facilities Mamt & Maintenar	nce Linear	3.855.40 Dollars
<i>Factors</i> 4271.05 d	1.015 FY00 Escalation			

Line Item 1a - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 214 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$499.77 average for this cluster

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0.88934 [SYS 061400] .88934200 - System

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Baseline Devl Proiect WBS Filter

1EFB

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 83% of the FY 99 budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficency return.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 32.31% (includes Linemen)

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

s		Cost Element	Skill	Department	Curve	Ouantity	Units
Ĺ	750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	113.08	Hours
	Factors	127.15 h					
Г				T	0.88934 [SYS 06140		
Ĺ	750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	169.62	Hours
	Factors	190.72 h					
ſ		I		T.,	0.88934 [SYS 06140		
L		STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	183.76	Hours
	Factors	206.62 h			0.00004 10000 00440	01 00004000 0	0
ſ	750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 06140 Linear	233.99	
L	Factors	263.11 h	CUZU IELECTRICIAINS	KETUR IIIIdus/Sile Sivs Steelworkers	Linear	233.99	Inouis
	raciors	203.11 11			0.88934 [SYS 06140	N1 88034200 - 9	System
ſ	750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	273.23	
	Factors	307.23 h	OVED TELECTRICITY WAS	THE TOTAL III MANUAL OF THE OWNER OF THE TOTAL III MANUAL OF THE TOTAL III MANUAL OF THE TOTAL O	Elitodi	210.20	ii loulo
					0.88934 [SYS 06140	01 .88934200 - 9	Svstem
	750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear		Hours
	Factors	63.57 h					
Ē					0.88934 [SYS 06140	01 88934200 - \$	Svstem
L	750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	245.00	Hours
	Factors	275.48 h					
F				T T	0.88934 [SYS 06140		
Ļ	750	STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear	18.85	Hours
	Factors	21.19 h					_
ſ		070 410417 71445 0405		1/5/01/1/1/01/01/01/01/1/01/1/01/1/01/1	0.88934 [SYS 06140		
Ļ		STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear	113.08	Hours
	Factors	127.15 h			0.00004 10000 00440	01 00004000 0	0
ſ	750	STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	I/E4011 Indust/Site Says Steelwarkers	0.88934 [SYS 06140 Linear		Hours
L		105.95 h	C040 IMAINTENANCE MACHINIST (IIICI EXD	KETUR IIIIdus/Sile Sivs Steelworkers	Linear	94.231	Inouis
	Factors	105.95 11			0.88934 [SYS 06140	n1 88934200 - 9	System
ſ	750	STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	113.08	
L	Factors	127.15 h	OUTO II / III I E I I O	THE TOTAL III MANUAL OF THE OWNER OF THE TOTAL III MANUAL OF THE TOTAL III MANUAL OF THE TOTAL O	Elitodi	110.001	ii loulo
					0.88934 [SYS 06140	01 .88934200 - 9	Svstem
	750	STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	193.16	
	Factors	217.19 h					
-					0.88934 [SYS 06140	01 .88934200 - \$	Svstem
Ĺ	750	STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	389.54	Hours
	Factors	438.01 h					
_					0.88934 [SYS 06140	01 .88934200 - 9	Svstem

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Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Ba
WBS Filter 1E
Activity Filter *

Baseline Devl 1EFB

1EFB0455	Baseline Cost ar	nd Basis of Estimate	WBS Filter Activity Filter	1EFB *	Starts In FY *
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwork		Linear	61.23 Hours
Factors 68.85 h					
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwork		0.88934 ISYS 0614 Linear	001 .88934200 - Svstem 75.38 Hours
Factors 84.76 h	COOU IFLUIVIBLES AND FIFLITITES	TRE TOTA IIII III III III III III III III III	CIS	Lilleal	75.561110015
					001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL WORKE	KE10H Indust/Site Srvs Steelwork	ers	Linear	166.47 Hours
Factors 187.18 h				0.88034 [SVS 0614	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelwork	ers	Linear	8.48 Hours
Factors 9.54 h					
		T.,			001 .88934200 - Svstem
751 OVERTIME BASE & PRE. Factors 6.36 h	C010 CARPENTERS	KE10H Indust/Site Srvs Steelwork	ers	Linear	5.66 Hours
raciors 6.36 II				0.88934 [SYS 0614	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelwork	ers	Linear	9.19 Hours
Factors 10.33 h					
754 OVEDTIME DAGE & DDE	Occor ELECTRICIANO				001 .88934200 - System
751 OVERTIME BASE & PRE. Factors 13.16 h	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwork	ers	Linear	11.70 Hours
13.10				0.88934 [SYS 0614	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwork	ers	Linear	12.25 Hours
Factors 13.77 h					
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwork	oro	0.88934 [SYS 0614 Linear	00] .88934200 - System 2.83 Hours
Factors 3.18 h	C020 ELECTRICIANS	RETUR III dust/Site Sivs Steelwork	eis	Lilleal	2.03 100 5
1 401015				0.88934 [SYS 0614	00] .88934200 - System
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwork	ers	Linear	13.66 Hours
Factors 15.36 h				0.00004 [0)/0.004	001 0000 1000 0 1
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Stys Steelwork	ors.	0.88934 SYS 0614	00] .88934200 - System 4.71 Hours
Factors 5.3 h	TOOTO INVINITEIVANCE IVIAOLINIO TAILO EAD	TILL TOTA THINGSVOICE OF VS SICCIWOTIC	CIS	Linear	4.7 III IOUIS
					001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelwork	ers	Linear	5.66 Hours
Factors 6.36 h				0.88034 [676.0614	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srys Steelwork	ers	Linear	0.94 Hours
Factors 1.06 h					
		T			001 .88934200 - Svstem
751 OVERTIME BASE & PRE. Factors 10.86 h	C070 PAINTERS	KE10H Indust/Site Srvs Steelwork	ers	Linear	9.66 Hours
Factors 10.86 h				0.88934 [SYS.0614	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelwork	ers	Linear	5.66 Hours
Factors 6.36 h					
754 OVERTIME DAGE & ROS	Occor DI LIMPEDO AND DIDEFTEE	1454011 1 1 1/0% 0 00 1			001 .88934200 - System
751 OVERTIME BASE & PRE. Factors 3.44 h	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwork	ers	Linear	3.06 Hours
1 1001015 3.44 II				0.88934 [SYS 0614	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwork	ers	Linear	19.48 Hours
Factors 21.9 h					
				0.88934 [SYS 0614	00] .88934200 - System

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Bas WBS Filter 1EI

Baseline Devl 1EFB

		Baseline Cost an	a Basis	of Estimate Activ	vity Filter *		Starts In FY *
751 OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers		Linear	3.77 Hours
Factors 4.24 h							
						0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers		Linear	8.32 Hours
Factors 9.36 h							
						0.88934 [SYS 06140	01 .88934200 - Svstem
A5C SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance		Linear	15.095.94 Dollars
Factors 16723.4 d		1.015 FY00 Escalation					

Line Item 3 - Preventive maintenance

0.88934 [SYS 061400] .88934200 - System

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

Approximately 6 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98
Item Desc - Fiscal Year Preventive Maintenance
Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$740.17 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99 Basis for adjustment - None.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50%

Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

S Cost Element	Skill	Department	Curve	Ouantity Units
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	57.75 Hours
Factors 64.94 h				
			0.88934 [SYS 0614	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (i	ncl Exp KE10H Indust/Site Srvs Steelworkers	Linear	43.32 Hours
Factors 48.71 h				
			0.88934 [SYS 0614	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTER	S KE10H Indust/Site Srvs Steelworkers	Linear	6.61 Hours
Factors 7.43 h				
			0.88934 [SYS 0614	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	2.89 Hours
Factors 3.25 h				
			0.88934 [SYS 0614	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (ii	ncl Exp KE10H Indust/Site Srvs Steelworkers	Linear	2.17 Hours
Factors 2.44 h				
			0.88934 ISYS 0614	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTER	S KE10H Indust/Site Srvs Steelworkers	Linear	0.33 Hours
Factors 0.37 h				
			0.88934 [SYS 0614	001 .88934200 - Svstem

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Baseline Devl WBS Filter 1EFB

 A5C
 SUPPLIES
 0000
 NONE

 Factors
 474.56
 d
 1.015
 -- FY00 Escalation -

Line Item 3a - Preventive maintenance

0.88934 [SYS 061400] .88934200 - System

0.88934 [SYS 061400] .88934200 - System

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 303 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$57.39 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 83% of the FY 99

budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficency return.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50% Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es		Cost Element		Skill		Department	Curve	Ouantity	Units	
L	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	226.15	Hours	
F	Factors	254.29 h								
_							0.88934 [SYS 061400] .88934200 - Svstem			
L	750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	169.62	Hours	
F	Factors	190.72 h								
_							0.88934 ISYS 06140	01 .88934200 - S	System	
L	750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	25.88	Hours	
F	Factors	29.1 h								
Г				1		1	0.88934 [SYS 06140			
L	751	OVERTIME BASE & PRE.	C020	IELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	11.30li	Hours	
F	Factors	12.71 h								
Г		I		I		I	0.88934 [SYS 06140			
_		OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	8.481	Hours	
F	Factors	9.54 h								
Г		0./5079.45.04.05.0.005		DI LIMBERG AND DIDEFITTEDS	1/5 / 01 1		0.88934 [SYS 06140			
L		OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.291	Hours	
F	Factors	1.45 h					0.00004 100/0.00440	01 00004000		
Г	150	OLIDDI IEO	0000	NONE	00400	E 1721 NA O NA	0.88934 [SYS 06140			
_		SUPPLIES	0000	NONE SYON Francisco	C210S	Facilities Mamt & Maintenance	Linear	1.677.33	Dollars	
F	Factors	1858.16 d		1.015 FY00 Escalation						

Line Item SYS - Contingency And Escalation

BOE

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
1EFB
Activity Filter
*

Activity ID: 1EFB0455 Baseline Cost and Basis of Estimate

Resources Cost Element		Skill	Department	Curve	<i>Ouantity</i>	Units
CON CONTINGENCY	0000 NC	ONE	ZDEPT No Department	Linear	5.136.72	Dollars
Factors 5136.72 Dollars		·		·		
ESC ESCALATION	0000 NC	ONE	ZDEPT No Department	Linear	10.607.06	Dollars

Factors 10607.1 Dollars

Activity ID: 1EX	Description: 125 Cluster Landlord Function	ons, FY05						Cost Risk	1 Schedule K	lisk 1		
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
1	Corrective maintenance	1.00	each	HC	670	668	14.382	3.839	0	18.221	5.005	23.226
1a	Corrective maintenance	0.83	each	HC	2.625	2.169	46.789	12.475	0	59.264	16.282	75.546
3	Preventive maintenance	1.00	each	HC	113	113	2.467	427	0	2.894	859	3.752
3a	Preventive maintenance	0.83	each	HC	443	366	8.018	1.386	0	9.404	2.790	12.194
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	61.212	61.212	0	61.212
	al for Activi	ty 1EXXXB0	455:		3.315	71.656	18.126	61.212	150.995	24.936	175.931	

Line Item 1 - Corrective maintenance

1EFB11

BOE

WBS No:

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 3 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$9104.66 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99 Basis for adjustment - None.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 30.77% (includes Linemen)

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08%

Metal Worker 4.62%

Stationary Operating Engineer 1.54%

Cost Element

750 STRAIGHT TIME BASE

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

CO10 CARPENTERS

Resources

Factors 48.71 h				
			0.88934 [SYS 0614001.88934200 - S	vstem
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 28.88	Hours
Factors 32.47 h				
			0.88934 [SYS 061400] .88934200 - S	vstem

Department

KE10H Indust/Site Srys Steelworkers

 750
 STRAIGHT TIME BASE
 C010
 CARPENTERS
 KE10H
 Indust/Site Srvs Steelworkers
 Linear
 46.93lHours

 Factors
 52.77
 h
 0.88934
 ISYS 0614001.88934200 - System

Curve

Linear

Starts In FY

Ouantity

Units

43 32 Hours

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filte

Baseline Devl 1EFB

		Activit	v Filter * Starts In FY
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 62.57 Hou
Factors 70.36 h			
			0.88934 [SYS 061400] .88934200 - Syste
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 59.76 Hou
actors 67.2 h			0.00004 [0.0004000] 0.0004000
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400] .88934200 - Syste Linear 69.79 Hou
Factors 78.47 h	1 CO20 ILLECTRICIANS	RETUIT IIIIdusi/Site Sivs Steelworkers	Lineal 09.7911100
10.11			0.88934 [SYS 061400] .88934200 - Syste
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIS	T (incl Exp KE10H Indust/Site Srvs Steelworkers	Linear 4.81 Hou
Factors 5.41 h			
			0.88934 [SYS 061400] .88934200 - Svste
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIS	T (incl Exp KE10H Indust/Site Srvs Steelworkers	Linear 24.07 Hou
actors 27.06 h			0.00004 [0.00.004.400] 0.000.4000 0.00
750 STRAIGHT TIME BASE	CO40 MAINTENANCE MACHUNIS	T (incl Exp KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400] .88934200 - Syste Linear 28.88 Hou
Factors 32.47 h	1 C040 IMAINTENANCE MACHINIS	THICLEXD RETURN III I I I I I I I I I I I I I I I I I	Lilleal 20.00IHUU
02.47 II			0.88934 [SYS 061400] .88934200 - Syste
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear 49.33 Hou
Factors 55.47 h			
			0.88934 [SYS 061400] .88934200 - Svste
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear 28.88 Hou
Cactors 32.47 h			
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFIT	TERS KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400] .88934200 - Syste Linear 19.25 Hou
Factors 21.65 h	CUSU PLUMBERS AND PIPEFIT	ERS RETURN IIII MUSI/SILE SIVS SLEEIWOIKEIS	Lineai 19.25 Hou
actors 21:05 II			0.88934 [SYS 061400] .88934200 - Syste
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFIT	TERS KE10H Indust/Site Srvs Steelworkers	Linear 99.48 Hou
<i>Tactors</i> 111.86 h			
			0.88934 [SYS 061400] .88934200 - Syste
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFIT	TERS KE10H Indust/Site Srvs Steelworkers	Linear 15.63 Hou
Cactors 17.58 h			
750 STRAIGHT TIME BASE	OCCO OTRUCTURAL AND META	L WORKE KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400] .88934200 - Syste Linear 42.52 Hou
Tactors 47.81 h	I C090 ISTRUCTURAL AND META	L WORKE KE10H Indust/Site Srvs Steelworkers	Linear 42.52 Hou
actors 47.01 II			0.88934 [SYS 061400] .88934200 - Syste
750 STRAIGHT TIME BASE	R070 WASTE TREATMENT OPE	RATOR A KE10H Indust/Site Srvs Steelworkers	Linear 14.44lHou
Cactors 16.24 h			
			0.88934 [SYS 0614001.88934200 - Syste
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 2.17 Hou
Factors 2.44 h			
	OO40 OARDENTERO	1/54011 1 1 1/0% 0 00 1 1	0.88934 [SYS 061400] .88934200 - Syste
	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 1.44 Hou
751 OVERTIME BASE & PRE.			
751 OVERTIME BASE & PRE. Factors 1.62 h			0.88934 [SVS.061400] 88934200 - Svete
Sactors 1.62 h	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	0.88934
	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400] .88934200 - Svste Linear 2.35 Hou
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	
751 OVERTIME BASE & PRE.	C010 CARPENTERS C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers KE10H Indust/Site Srvs Steelworkers	Linear 2.35 Hou

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Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Activity Filter Baseline Devl 1EFB

TEXXXB0400	Baseline Cost and Basis of	of Estimate Activity Filter	. *	Starts In FY *
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS KE10H I	ndust/Site Srvs Steelworkers	Linear	2.99 Hours
Factors 3.36 h				
		1 1/21: 2 2: 1	0.88934 [SYS 06140	
751 OVERTIME BASE & PRE. Factors 3.52 h	C020 ELECTRICIANS KE10H II	ndust/Site Srvs Steelworkers	Linear	3.13 Hours
Factors 3.52 h			0.88934 [SYS 06140	01 88934200 - System
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp KE10H I	ndust/Site Srvs Steelworkers	Linear	1.20 Hours
Factors 1.35 h				
			0.88934 [SYS 06140	
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp KE10H I	ndust/Site Srvs Steelworkers	Linear	1.44 Hours
Factors 1.62 h			0.88934 [SYS 06140	01 00004000 Cyatam
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp. KE10H II	ndust/Site Srys Steelworkers	0.00934 1313 00140 Linear	0.24 Hours
Factors 0.27 h		HIMMOVORO OF VO OKOSIWOTKOTO	Elliodi	0.E III 10410
			0.88934 [SYS 06140	
751 OVERTIME BASE & PRE.	C070 PAINTERS KE10H II	ndust/Site Srvs Steelworkers	Linear	2.46 Hours
Factors 2.77 h				
751 OVERTIME BASE & PRE.	C070 PAINTERS KE10H II	ndust/Site Srvs Steelworkers	0.88934 [SYS 06140 Linear	01 .88934200 - System 1.44 Hours
Factors 1.62 h	1 COTO IFAINTERS RETOR II	Hdust/Site Sivs Steetworkers	Lilleai	1.44Inouis
1.02			0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS KE10H II	ndust/Site Srvs Steelworkers	Linear	0.96 Hours
Factors 1.08 h				
754 0/5071145 0405 0 005	C080 PLUMBERS AND PIPEFITTERS KE10H II	1. 1/0% 0. 01. 1. 1.	0.88934 [SYS 06140	0.78 Hours
751 OVERTIME BASE & PRE. Factors 0.88 h	C080 PLUMBERS AND PIPEFITTERS KE10H	ndust/Site Srvs Steelworkers	Linear	0.78 Hours
ractors 0.00 II			0.88934 [SYS 06140	01 88934200 - System
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS KE10H II	ndust/Site Srvs Steelworkers	Linear	4.97 Hours
Factors 5.59 h				
			0.88934 [SYS 06140	
751 OVERTIME BASE & PRE.	C090 STRUCTURAL AND METAL WORKE KE10H	ndust/Site Srvs Steelworkers	Linear	2.13 Hours
Factors 2.39 h			0.88934 [SYS 06140	01 88034200 - Systom
751 OVERTIME BASE & PRE.	R070 WASTE TREATMENT OPERATOR A KE10H II	ndust/Site Srvs Steelworkers	U.86934 1313 06140	0.72 Hours
Factors 0.81 h				- w
			0.88934 [SYS 06140	
A5C SUPPLIES		acilities Mamt & Maintenance	Linear	3.855.40 Dollars
<i>Factors</i> 4271.05 d	1.015 FY00 Escalation			

Line Item 1a - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 214 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$499.77 average for this cluster

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0.88934 [SYS 061400] .88934200 - System

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Baseline Devl Proiect WBS Filter 1EFB

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 83% of the FY 99 budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficency return.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 32.31% (includes Linemen)

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

s		Cost Element	Skill	Department	Curve	Ouantity	Units
Ĺ	750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	113.08	Hours
	Factors	127.15 h					
Г				T	0.88934 [SYS 06140		
Ĺ	750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	169.62	Hours
	Factors	190.72 h					
ſ		I		T.,	0.88934 [SYS 06140		
L		STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	183.76	Hours
	Factors	206.62 h			0.00004 10000 00440	01 00004000 0	0
ſ	750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srys Steelworkers	0.88934 [SYS 06140 Linear	233.99	
L	Factors	263.11 h	CUZU IELECTRICIAINS	KETUR IIIIdus/Sile Sivs Steelworkers	Linear	233.99	Inouis
	raciors	203.11 11			0.88934 [SYS 06140	N1 88034200 - 9	System
ſ	750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	273.23	
	Factors	307.23 h	OVED TELECTRICITY WAS	THE TOTAL III MANUAL OF THE OWNER OF THE TOTAL III MANUAL OF THE TOTAL III MANUAL OF THE TOTAL O	Elitodi	210.20	ii loulo
					0.88934 [SYS 06140	01 .88934200 - 9	Svstem
	750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear		Hours
	Factors	63.57 h					
Ē					0.88934 [SYS 06140	01 88934200 - \$	Svstem
L	750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	245.00	Hours
	Factors	275.48 h					
F				T T	0.88934 [SYS 06140		
Ļ	750	STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear	18.85	Hours
	Factors	21.19 h					_
ſ		070 410417 71445 0405		1/5/01/1/1/01/01/01/01/1/01/1/01/1/01/1	0.88934 [SYS 06140		
Ļ		STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear	113.08	Hours
	Factors	127.15 h			0.00004 10000 00440	01 00004000 0	0
ſ	750	STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	I/E4011 Indust/Site Says Steelwarkers	0.88934 [SYS 06140 Linear		Hours
L		105.95 h	C040 IMAINTENANCE MACHINIST (IIICI EXD	KETUR IIIIdus/Sile Sivs Steelworkers	Linear	94.231	Inouis
	Factors	105.95 11			0.88934 [SYS 06140	n1 88934200 - 9	System
ſ	750	STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	113.08	
L	Factors	127.15 h	OUTO II / III I E I I O	THE TOTAL III MANUAL OF THE OWNER OF THE TOTAL III MANUAL OF THE TOTAL III MANUAL OF THE TOTAL O	Elitodi	110.001	ii loulo
					0.88934 [SYS 06140	01 .88934200 - 9	Svstem
	750	STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	193.16	
	Factors	217.19 h					
-					0.88934 [SYS 06140	01 .88934200 - \$	Svstem
Ĺ	750	STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	389.54	Hours
	Factors	438.01 h					
_					0.88934 [SYS 06140	01 .88934200 - 9	Svstem

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WBS No: 1EFB11 1EXXXB0455 Activity ID:

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect

Baseline Devl WBS Filter 1E
Activity Filter * 1EFB

	Baseline Cost ar	nd Basis of Estimate	WBS Filter 1EFB Activity Filter *	Starts In FY *
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwork		61.23 Hours
Factors 68.85 h			0.00004 100/0 004	4001 00004000 - 0
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwork		4001 .88934200 - Svstem 75.38 Hours
Factors 84.76 h	1 000 II EUMBEITO //TET II ETT ETT			
	0000 070007000 000070	1/5/01/ 1 //0/ 0 0/ 1		4001 .88934200 - Svstem
750 STRAIGHT TIME BASE Factors 187.18 h	C090 ISTRUCTURAL AND METAL WORKE	KE10H Indust/Site Srvs Steelwork	ers Linear	166.47 Hours
107.10 11			0.88934 [SYS 061	4001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelwork		8.48 Hours
Factors 9.54 h			0.80034 1575.064	4001 99024200 System
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelwork		4001 .88934200 - Svstem 5.66 Hours
Factors 6.36 h				
	Lacco lacapacitação	1/5/01/ 1 //0/ 0 0/ 1		4001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelwork	ers Linear	9.19 Hours
10.33			0.88934 ISYS 061	4001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwork		11.70 Hours
Factors 13.16 h				
754 OVERTIME DAGE & DDE	Occo ELECTRICIANO	1/5/10/11 1 1/0% 0 00 1 1		4001 .88934200 - Svstem
751 OVERTIME BASE & PRE. Factors 13.77 h	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwork	ers Linear	12.25 Hours
actors 13.77 II			0.88934 [SYS 061	400] .88934200 - System
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwork		2.83 Hours
Factors 3.18 h				
754 OVERTIME DAGE & DDE	Occo ELECTRICIANO	1/5/10/11 1 1/0% 0 00 1 1		400] .88934200 - System
751 OVERTIME BASE & PRE. Factors 15.36 h	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwork	ers Linear	13.66 Hours
13.30			0.88934 [SYS 061	400] .88934200 - System
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelwork		4.71 Hours
Factors 5.3 h				
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Strue Steelwork		4001 .88934200 - Svstem 5.66 Hours
Factors 6.36 h	1 C040 IMAINTENANCE MACHINIST (IIICI EXD	RETURN IIIIdust/Site Sivs Steelwork	ers i Lilleai	3.00ITOUIS
			0.88934 [SYS 061	4001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelwork	ers Linear	0.94 Hours
Factors 1.06 h			0.00004 10000	4001 0000 4000 0
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelwork		4001 .88934200 - Svstem 9.66 Hours
Factors 10.86 h	1 CO/O IFAINTENS	RETOTE IIIIdust/Site Sivs Steetwork	eis Liileai	9.001110015
			0.88934 [SYS 061	4001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelwork	ers Linear	5.66 Hours
Factors 6.36 h			0.00004 10000.004	4001 0000 4000 C
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwork		4001 .88934200 - Svstem 3.06 Hours
Factors 3.44 h	, 5000 II LOWIDLING AND FIFLI II I LNG	TE TOTA IIII III III III III III III III III	CIS LIIICAI	3.00II IOUIS
-				4001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwork		19.48 Hours
Factors 21.9 h				

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Baseline Devl WBS Filter 1EFB

	Bas	eline Cost and Basis o	of Estimate	Activity Filter	*	Starts In FY *
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPE	FITTERS KE10H I	ndust/Site Srvs Steelworkers		Linear	3.77 Hours
Factors 4.24 h						
					0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C090 STRUCTURAL AND ME	TAL WORKE KE10H	ndust/Site Srvs Steelworkers		Linear	8.32 Hours
Factors 9.36 h						
					0.88934 [SYS 06140	01 .88934200 - Svstem
A5C SUPPLIES	0000 NONE	C210S	Facilities Mamt & Maintenance		Linear	15.095.94 Dollars
Factors 16723 4 d	1 015 FY00 Esc	alation				

Line Item 3 - Preventive maintenance

0.88934 [SYS 061400] .88934200 - System

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

Approximately 6 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98
Item Desc - Fiscal Year Preventive Maintenance
Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$740.17 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99 Basis for adjustment - None.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50%

Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Ouantity	Units
750 STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers		Linear	57.75	Hours
Factors 64.94 h								
			,			.88934 [SYS 06140	01 .88934200 - 3	Svstem
750 STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers		Linear	43.32	Hours
Factors 48.71 h								
			,			.88934 [SYS 06140	01 .88934200 - 3	Svstem
750 STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers		Linear	6.61	Hours
Factors 7.43 h								
					0	.88934 [SYS 06140	01.88934200 - 3	Svstem
751 OVERTIME BASE & PRE	. C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers		Linear	2.89	Hours
Factors 3.25 h								
					0	.88934 [SYS 06140	01.88934200 - 3	Svstem
751 OVERTIME BASE & PRE	. C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers		Linear	2.17	Hours
Factors 2.44 h								
			,			.88934 [SYS 06140	01 .88934200 - 3	Svstem
751 OVERTIME BASE & PRE	. C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers		Linear	0.33	Hours
Factors 0.37 h								
					0	.88934 [SYS 06140	01 .88934200 - 3	Svstem

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Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Baseline Devl Proiect WBS Filter 1EFB

Starts In FY 428 38 Dollars Linear

A5C SUPPLIES 0000 NONE Factors 474.56 d 1.015 -- FY00 Escalation --

Line Item 3a - Preventive maintenance

0.88934 [SYS 061400] .88934200 - System

0.88934 [SYS 061400] .88934200 - System

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

C210S Facilities Momt & Maintenance

·Approximately 303 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$57.39 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 83% of the FY 99

budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficency return.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50% Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

s		Cost Element		Skill		Department	Curve	Ouantity Units
	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	226.15 Hours
I	Factors	254.29 h						
							0.88934 [SYS 06140	01 .88934200 - Svstem
	750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	169.62 Hours
I	Factors	190.72 h						
_							0.88934 [SYS 06140	01 .88934200 - Svstem
	750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	25.88 Hours
I	Factors	29.1 h						
							0.88934 [SYS 06140	01 .88934200 - Svstem
	751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	11.30 Hours
I	Factors	12.71 h						
							0.88934 [SYS 06140	01 .88934200 - Svstem
	751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	8.48 Hours
I	Factors	9.54 h						
							0.88934 [SYS 06140	01 .88934200 - Svstem
	751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.29 Hours
I	Factors	1.45 h						
							0.88934 [SYS 06140	01 .88934200 - Svstem
	A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	1.677.33 Dollars
I	Factors	1858.16 d		1.015 FY00 Escalation				

Line Item SYS - Contingency And Escalation

BOE

Rockv Flats Closure Project

Baseline Cost and Basis of Estimate

Project
WBS Filter
1EFB
Activity Filter
*

Starts In FY

Resources

WBS No:

Activity ID:

I/nits Cost Element Skill Department Curve 0000 NONE CON CONTINGENCY ZDEPT No Department Linear 43,440,79 Dollars 43440.8 Dollars 0000 NONE ZDEPT No Department 17.771.65 Dollars ESC ESCALATION Linear

Factors 17771.7 Dollars

1EFB11

1EXXXB0455

WBS No: 1EFB1	2 Title: 750 Cluster Landlord											
Activity ID: 1EFE	Description: 750 Cluster Landlord Function	ons, FY00						Cost Risk	2 Schedule R	risk 1		
Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Corrective maintenance	1.00	each	HC	1.736	1.736	36.404	23.624	0	60.029	17.765	77.794
3	Preventive maintenance	1.00	each	HC	338	338	7.169	2.587	0	9.756	3.498	13.254
5 - tH568100B10	SSOC Support to Blda 705	1.00	each	EE	413	413	11.151	0	0	11.151	5.442	16.593
5a	SSOC Support to Blda 705	1.00	each	EE	221	221	5.976	0	0	5.976	2.916	8.892
	То	tal for Activ	ity 1EFB046	0:		2.708	60.700	26.211	0	86.911	29.622	116.533

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, Negotiated and was awarded the Site maintenance contract. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98(This data was derived from the MMS system), and the proposed value was applied to FY99. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 142 corrective/routine maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Ad hoc queries from the MMS and 002A and spending variance reports from the P&I Reporting system for Corrective Maintenance Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$1872.34 average for this cluster

Unit Adjustment factor - This activity adjusted down by 8.1% per FCP 1999-8074

Revised Unit - \$1720.68

Basis for adjustment - FY 99 FCP 1999-8074 representing productivity improvements over the project lifecycle.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 32.31% (includes Linemen)

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es		Cost Element		Skill		Department	Curve	Ouantity	Units
	750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	127.70	Hours
_	_					·		-	•

Factors 255 h 0.3612 May 2000 Earned Value Factor

			1.38645 [SYS 061300	01 1.386448 - Target
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	78.62 Hours
Factors 157 h	0.3612 May 2000 Earned	l Value Factor		

1.38645 [SYS 061300] 1.386448 - Target

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Baseline Devl WBS Filter 1EFB Activity Filter *

Starts In FY * ar 117.68 Hours ISYS 0613001 1.386448 - Target
ar 162.25 Hours
ISYS 061300] 1.386448 - Target
ar 189.80 Hours
ISYS 0613001 1.386448 - Target
ar 170.27 Hours
ISYS 0613001 1.386448 - Target ar 39.06 Hours
ar 39.06lHours
[SYS 061300] 1.386448 - Target
ar 78.62 Hours
ISYS 0613001 1.386448 - Target
ar 65.60lHours
(O)(O 0010001 1 000110 T
ISYS 0613001 1.386448 - Target ar 13.02 Hours
ar 13.02 Hours
[SYS 061300] 1.386448 - Target
ar 134.21 Hours
[SYS 061300] 1.386448 - Target
ar 78.62 Hours
[SYS 061300] 1.386448 - Target ar 52.08 Hours
ar 52.08 Hours
[SYS 061300] 1.386448 - Target
ar 42.57 Hours
ISYS 0613001 1.386448 - Target
ar 270.42 Hours
ISYS 0613001 1.386448 - Target
ar 115.68 Hours
ISYS 061300] 1.386448 - Target
ar 22.877.93 Dollars
ELGII.GODONGI
ISYS 0613001 1.386448 - Target
ar 746.18 Dollars

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster

1.38645 [SYS 061300] 1.386448 - Target

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl 1EFB

Activity Filter Starts In FY

in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 160 preventative maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$269.11 average in this cluster

Unit Adjustment factor - This activity adjusted down by 8.1% per FCP 1999-8074

Revised Unit - \$247.31

Basis for adjustment - FY 99 FCP 1999-8074 representing productivity improvements over the project lifecycle.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50% Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

5	Cost Element		Skill		Department	Curve	Ouantity Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	156.75 Hours
Factor.	s 313 h		0.3612 May 2000 Earned Value Fac	ctor			
						1.38645 [SYS 06130	01 1.386448 - Target
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	162.76 Hours
Factor.	s 325 h		0.3612 May 2000 Earned Value Fac	ctor			
_						1.38645 [SYS 06130	01 1.386448 - Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	18.03 Hours
Factor.	s 36 h		0.3612 May 2000 Earned Value Fac	ctor			
						1.38645 [SYS 06130	01 1.386448 - Target
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	2.504.44 Dollars
Factor.	s 1.015 FY00 Escalation		4927.12 h		0.3612 May 2000 Earned Value Factor		
_			_			1.38645 [SYS 06130	0l 1.386448 - Target
A5T	TAXES	0000	NONE	C210S	Facilities Momt & Maintenance	Linear	82.85 Dollars
Factor.	s 1.015 FY00 Escalation		163 dollars		0.3612 May 2000 Earned Value Factor		

Line Item 5 - tH568100B10 - SSOC Support to Bldg 705

BOE

Estimators Experience - One Year

Experience Item Desc - Custodial & SOE support to Bldg 705 from SSOC

Breakdown of Cost Data:

Item - Labor for one Fiscal Year, performing organization indicated services would be supplied on an over time basis only.

Units - Hours

Unit Cost - \$48.81

Unit Cost Adjustment factor - None

Revised Unit Cost - none

Basis for adjustment - None

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resource

ces		Cost Element		Skill		Department	Curve	Quantity	Units
	751	OVERTIME BASE & PRE.	L030	UTILITY WORKER	KE10H	Indust/Site Srvs Steelworkers	Linear	413.00	Hours

441.955 H 0.67401 January 2000 Earned Value Factor Factors

1.38645 [SYS 061300] 1.386448 - Target

1.38645 [SYS 061300] 1.386448 - Target

WBS No: 1EFB12 Rocky Flats Closure Project
Activity ID: 1EFB0460 Baseline Cost and Basis of Estimate

Proiect Baseline Devl WBS Filter 1EFB Activity Filter *

Starts In FY *

Line Item 5a - SSOC Support to Bldg 705

BOE

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Estimators Experience - One Year

Experience Item Desc - Custodial & SOE support to Bldg 705 from SSOC

Breakdown of Cost Data:

Item - Labor for one Fiscal Year, performing organization indicated services would be supplied on an over time basis only.

Units - Hours Unit Cost - \$48.81

Unit Cost Adjustment factor - None

Revised Unit Cost - none Basis for adjustment - None

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es		Cost Element		Skill		Department	Curve	Quantity	Units
	751	OVERTIME BASE & PRE.	L030	UTILITY WORKER	KE10H	Indust/Site Srvs Steelworkers	Linear	221.32	Hours

Factors 441.955 H

0.3612 May 2000 Earned Value Factor

1.38645 [SYS 061300] 1.386448 - Target

Activity ID: 1EFB0470 Description: 750 Cluster Landlord Functions, FY01

Cost Risk 2 Schedule Risk

ACTIVITY ID. TEF	Description. 130 Cluster Landord Function	1101 1,6110						Cost Risk	Z Schedule N	isk I		
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
1	Corrective maintenance	1.00	each	HC	3.083	3.083	64.650	41.354	0	106.004	30.838	136.843
3	Preventive maintenance	1.00	each	HC	599	599	12,731	4,595	0	17,326	6,073	23,398
5 - tH568101B10	SSOC Support to Bldg 705	1.00	each	EE	364	364	9,839	0	0	9,839	4,693	14,532
5a	SSOC Support to Bldg 705	1.00	each	EE	364	364	9,839	0	0	9,839	4,693	14,532
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	10,014	10,014	0	10,014
	Tot	al for Activ	ty 1EFB0470	0:		4,412	97,059	45,949	10,014	153,022	46,297	199,320

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, Negotiated and was awarded the Site maintenance contract. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98(This data was derived from the MMS system), and the proposed value was applied to FY99. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 142 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Ad hoc queries from the MMS and 002A and spending variance reports from the P&I Reporting system for Corrective Maintenance Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$1872.34 average for this cluster

Unit Adjustment factor - This activity adjusted down by 8.1% per FCP 1999-8074

Revised Unit - \$1720.68

Basis for adjustment - FY 99 FCP 1999-8074 representing productivity improvements over the project lifecycle.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 32.31% (includes Linemen)

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Activity Filter

Cr I

Baseline Devl

1EFB

Trigon T				Daseille Cost	and basis of Estimate	Activity Filter *	Starts In F
235	s						Quantity
Design			C010 C	ARPENTERS	KE10H Indust/Site Srvs Steelworke	ers Linear	209.0
Total Tota	Factor:	s 235 h				0.00024	VC 0644001 00024200
Total Time	750	STRAIGHT TIME BASE	C010 C	ARDENTERS	KE10H Indust/Site Style Steelworks		<u>YS 0614001.88934200</u> 139.6
0.8834 FSYS 0614001 88934			1 0010 10	ANI LIVILIO	TIL TOTT IIII GUSVOITE SIVS STEETWOINE	Linear	100.0
STRAIGHT TIME BASE						0.88934 [S	YS 0614001 .88934200
STRAIGHT TIME BASE	750	STRAIGHT TIME BASE	C010 C	ARPENTERS	KE10H Indust/Site Srvs Steelworke	ers Linear	226.7
STRAIGHT TIME BASE C020 ELECTRICIANS KE10H Indust/Site Sivs Steehvorkers Linear Strators STRAIGHT TIME BASE C020 ELECTRICIANS KE10H Indust/Site Sivs Steehvorkers Linear Strators Straight Time BASE C020 ELECTRICIANS KE10H Indust/Site Sivs Steehvorkers Linear Strators Straight Time BASE C020 ELECTRICIANS KE10H Indust/Site Sivs Steehvorkers Linear Strators Straight Time BASE C020 ELECTRICIANS KE10H Indust/Site Sivs Steehvorkers Linear Strators Straight Time BASE C020 ELECTRICIANS KE10H Indust/Site Sivs Steehvorkers Linear Strators Straight Time BASE C020 ELECTRICIANS KE10H Indust/Site Sivs Steehvorkers Linear Strators Straight Time BASE C040 Maintenance Machinist (find Exp KE10H Indust/Site Sivs Steehvorkers Linear Strators Straight Time BASE C040 Maintenance Maintenance KE10H Indust/Site Sivs Steehvorkers Linear Strators Straight Time BASE C040 Maintenance KE10H Indust/Site Sivs Steehvorkers Linear Strators Straight Time BASE C040 Maintenance KE10H Indust/Site Sivs Steehvorkers Linear Strators Straight Time BASE C040 Maintenance KE10H Indust/Site Sivs Steehvorkers Linear Strators Straight Time BASE C040 Maintenance C040 KE10H Indust/Site Sivs Steehvorkers Linear Strators Straight Time BASE C040 Maintenance C040 KE10H Indust/Site Sivs Steehvorkers Linear Strators Straight Time BASE C050 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Sivs Steehvorkers Linear Strators Straight Time BASE C050 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Sivs Steehvorkers Linear Strators Straight Time BASE C050 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Sivs Steehvorkers Linear Strators Straight Time BASE C050 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Sivs Steehvorkers Linear Strators Straight Time BASE C050 Straight Time BASE C050 Straight Time BASE C050 Straight Time BAS	Factors	s 255 h					
To STRAIGHT TIME BASE C020 ELECTRICIANS KE10H Indust/Site Sivs Steehvorkers Linear 3	750	STRAIGHT TIME BASE	C020 E	LECTRICIANS	KE10H Indust/Site Save Steelworks		
Company Comp			1 C020 IL	LECTRICIANS	TETOTI IIIIdusVSite SIVS Steelworke	Elileai	09.0
STRAIGHT TIME BASE						0.88934 [S	YS 061400] .88934200
0.88934 ISYS 0614001.88934 ISYS 0614001.88934	750		C020 E	LECTRICIANS	KE10H Indust/Site Srvs Steelworke	ers Linear	302.3
STRAIGHT TIME BASE C020 ELECTRICIANS KE10H Indust/Site Srvs Steelworkers Linear 2	Factors	s 340 h					
Color Colo	750	STRAIGHT TIME BASE	C020 F	LECTRICIANS	KE10H Indust/Site Save Steelwarks		
Color			1 CU2U E	LLOTRICIANS	NETOT IIIuusvoile Sivs Steelworke	no Linear	
Total Straight Time Base Co40 Maintenance Machinist (incl Exp. Ke10H Indust/Site Srvs Steelworkers Linear 1						0.88934 [S	YS 061400] .88934200
250 STRAIGHT TIME BASE C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers Linear 1	750	STRAIGHT TIME BASE	C020 E	LECTRICIANS	KE10H Indust/Site Srvs Steelworke	ers Linear	337.0
TSO STRAIGHT TIME BASE C040 MAINTENANCE MACHINIST (Incl Exp KE10H Indust/Site Srvs Steelworkers Linear 1	Factors	s 379 h					
Tool STRAIGHT TIME BASE Co40 MAINTENANCE MACHINIST (incl Exp. KE10H Indust/Site Srvs Steelworkers Linear 1	750	OTDAIGUIT TIME DAGE	0040	A INITENIANIOE MAACHUNUCT (in al Eu	- KE4011 Indust/Cits Come Cts shows In-	0.88934 [S	
0.88934 ISYS 0614001 88934 ISYS 0614001 ISB 0 Indust/Site Srvs Steelworkers Inear 1 0.88934 ISYS 0614001 ISB 0 IST			I CU40 IIV	AINTENANCE MACHINIST (INCLEX	D KETUH Indust/Site Srvs Steelworke	ers Linear	23.1
Table Tabl	rucior.	5 20 11				0.88934 [S	YS 0614001 .88934200
TSO STRAIGHT TIME BASE C040 MAINTENANCE MACHINIST (incl Exo KE10H Indust/Site Srvs Steelworkers Linear 1	750	STRAIGHT TIME BASE	C040 M	AINTENANCE MACHINIST (incl Ex	p KE10H Indust/Site Srvs Steelworke		
Tool STRAIGHT TIME BASE C040 MAINTENANCE MACHINIST (incl Exo KE10H Indust/Site Srvs Steelworkers Linear 1	Factor:	s 131 h					
Tactors 157 h	750	OTDAIGHT TIME DAGE	0040	A INITENIANIOE MAA OLUMUST (in al Eu	- KE4011 Indust/Cits Come Cts shore In-		
To STRAIGHT TIME BASE C070 PAINTERS KE10H Indust/Site Srvs Steelworkers Linear 2			I CU40 IIV	AINTENANCE MACHINIST (INCLEX	D KETUH Indust/Site Srvs Steelworke	ers Linear	139.0
Tool STRAIGHT TIME BASE C070 PAINTERS KE10H Indust/Site Srvs Steelworkers Linear 2	rucior.	3 137 11				0.88934 [S	YS 0614001 .88934200
0.88934 ISYS 0614001.88934: Isys 06140	750	STRAIGHT TIME BASE	C070 P	AINTERS	KE10H Indust/Site Srvs Steelworke		
T50 STRAIGHT TIME BASE C070 PAINTERS KE10H Indust/Site Srvs Steelworkers Linear 1	Factor:	s 268 h					
Tactors 157 h		075 1 0 UT 7 UT 5 1 0 5	0.70	ANITEDO	1/5/01/1/1/20/ 0 0/ 1/		YS 0614001 .88934200
104 N N N N N N N N N			I C070 IP	AINTERS	KE10H Indust/Site Srvs Steelworke	ers Linear	139.6
T50 STRAIGHT TIME BASE C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers Linear	rucior.	5 137 11				0.88934 [S	YS 0614001 88934200
To STRAIGHT TIME BASE C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers Linear 4	750	STRAIGHT TIME BASE	C080 P	LUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworke		
T50 STRAIGHT TIME BASE C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers Linear 4	Factor:	s 104 h					
Tactors S40 h		075 4 10 1 T T 14 1 5 4 0 5		LUMBERS AND DIRECTOR	1/5/01/1/1/20/ 0 0/ 1/1/		
To STRAIGHT TIME BASE C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers Linear			C080 P	LUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworke	ers Linear	480.2
T50 STRAIGHT TIME BASE C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers Linear	racior	5 J 4 U II				0 88934 IS	YS 0614001 88934200
Tactors 85 h	750	STRAIGHT TIME BASE	C080 P	LUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworke		
750 STRAIGHT TIME BASE C090 STRUCTURAL AND METAL WORKE KE10H Indust/Site Srvs Steelworkers Linear 2 Factors 231 h 0.88934 ISYS 061400] .88934 A5C SUPPLIES 0000 NONE C210S Facilities Mamt & Maintenance Linear 40.0	Factor:						
Factors 231 h A5C SUPPLIES 0.000 NONE C210S Facilities Mamt & Maintenance Linear 40.0			T ==== I==				
A5C SUPPLIES 0.000 NONE C210S Facilities Mamt & Maintenance Linear 40.0			C090 S	TRUCTURAL AND METAL WORKI	E KE10H Indust/Site Srvs Steelworke	ers Linear	205.4
A5C SUPPLIES 0000 NONE C210S Facilities Momt & Maintenance Linear 40.0	Factors	s ∠sı n				21 1/2088 0	VS 0614001 88934200
	A5C	SUPPLIES	0000 N	ONE	C210S Facilities Mgmt & Maintena	nce Linear	
				44344.1 d			

WBS No: 1EFB12 Rocky Flats Closure Project Activity ID: 1EFB0470 Raseline Cost and Basis of Estimate

Rockv Flats Closure Project

Baseline Cost and Basis of Estimate

Project

WBS Filter

1EFB

**

Department

KE10H Indust/Site Srvs Steelworkers

					Activity Filler		Starts III I I
A5T	TAXES	0000 NONI	E	C210S	Facilities Mgmt & Maintenance	Linear	1.325.14 Dollars
Factors	1.015 FY00 Escalation	146					·

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated and was awarded the Site

maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 160 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$269.11 average in this cluster

Unit Adjustment factor - This activity adjusted down by 8.1% per FCP 1999-8074

C020 ELECTRICIANS

Revised Unit - \$247.31

750 STRAIGHT TIME BASE

Basis for adjustment - FY 99 FCP 1999-8074 representing productivity improvements over the project lifecycle.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Cost Element

Maint. Mech 37.50%

Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Factors 313 h				
			0.88934 [SYS 061400	01 .88934200 - Svstem
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Ex	p KE10H Indust/Site Srvs Steelworkers	Linear	289.04 Hours
Factors 325 h				
			0.88934 [SYS 061400	01 .88934200 - System
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	32.02 Hours
Factors 36 h			·	
			0.88934 [SYS 061400	01 .88934200 - Svstem
A5C SUPPLIES	0000 NONE	C210S Facilities Mgmt & Maintenance	Linear	4.447.62 Dollars
Factors 1.015 FY00 Escalation	4927.12 h	•		
			0.88934 [SYS 061400	01 .88934200 - System
A5T TAXES	0000 NONE	C210S Facilities Mgmt & Maintenance	Linear	147.14 Dollars
Factors 163 dollars	1.015 FY00 Escalation			

Line Item 5 - tH568101B10 - SSOC Support to Bldg 705

BOE

Estimators Experience - One Year

Experience Item Desc - Custodial & SOE support to Bldg 705 from SSOC

Breakdown of Cost Data:

Item - Labor for one Fiscal Year, performing organization indicated services would be supplied on an over time basis only.

Units - Hours

Unit Cost - \$48381

Unit Cost Adjustment factor - None

Revised Unit Cost - None

Basis for adjustment - None

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Curve

Linear

Camer In EV

Ouantity

0.88934 [SYS 061400] .88934200 - System

Units

278.36 Hours

0.88934 [SYS 061400] .88934200 - System

Resources

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl

1EFB Activity Filter

Department	Curve	Ouantity	Units
KE10H Indust/Site Srvs Steelworkers	Linear	364.41	Hours

Factors 409.75 H

0.88934 [SYS 061400] .88934200 - System

Starts In FY

Line Item 5a - SSOC Support to Bldg 705

751

BOE

Estimators Experience - One Year

OVERTIME BASE & PRE

Cost Element

Experience Item Desc - Custodial & SOE support to Bldg 705 from SSOC

Breakdown of Cost Data:

Item - Labor for one Fiscal Year, performing organization indicated services would be supplied on an over time basis only.

Units - Hours

Unit Cost - \$48381

Unit Cost Adjustment factor - None

Revised Unit Cost - None Basis for adjustment - None

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Total for Activity 1EFB0480:

Skill

L030 UTILITY WORKER

Resources

es	Cost Element Skill			Department	Curve	Quantity	Units		
	751	OVERTIME BASE & PRE.	L030	UTILITY WORKER	KE10H	Indust/Site Srvs Steelworkers	Linear	364.41	Hours

Factors 409.75 H

0.88934 [SYS 061400] .88934200 - System

Line Item SYS - Contingency And Escalation

BOE

Resources

Line

es		Cost Element	Skill			Department	Curve	Ouantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	6.033.62	Dollars
F	actors	6033.62 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	3.980.67	Dollars

ESC ESCALATION Factors 3980.67 Dollars

Activity ID: 4EED0400 750 Cluster Landlord Functions EV02 2 Cahadula Piek

ID. IEFE	Description. 130 Cluster Landiord i direction	115, 1 102				COSI RISK Z Schedule RISK 1						
ne Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
	Corrective maintenance	1.00	each	HC	3.083	3.083	64.650	41.354	0	106.004	22.822	128.826
	Preventive maintenance	1.00	each	HC	599	599	12.731	4.595	0	17.326	4.494	21.820
8102B10	SSOC Support to Blda 705	1.00	each	EE	364	364	9.839	0	0	9.839	3.473	13.312
	SSOC Support to Blda 705	1.00	each	EE	364	364	9.839	0	0	9.839	3.473	13.312
	Contingency And Escalation	1.00	ea	EE	0	0	0	0	26.427	26.427	0	26.427

Line Item 1 - Corrective maintenance

BOE

5 - tH568 SYS

> Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, Negotiated and was awarded the Site maintenance contract. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98(This data was derived from the MMS system), and the proposed value was applied to FY99. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the

4 412

97.059

·Approximately 142 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Ad hoc queries from the MMS and 002A and spending variance reports from the P&I Reporting system for Corrective Maintenance Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$1872.34 average for this cluster

Unit Adjustment factor - This activity adjusted down by 8.1% per FCP 1999-8074

Revised Unit - \$1720.68

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Activity Filter Baseline Devl 1EFB

Starts In FY *

Basis for adjustment - FY 99 FCP 1999-8074 representing productivity improvements over the project lifecycle.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 32.31% (includes Linemen)

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

				·	
s	Cost Element	Skill	Department	Curve	Ouantity Units
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	226.78 Hours
Factors	255 h				
				0.88934 ISYS 06140	
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	139.63 Hours
Factors	157 h				
750	OTD A IOUT TIME DAGE	C010 CARPENTERS	1/54011 1 1 1/01: 0 0: 1 1	0.88934 ISYS 06140	
750	STRAIGHT TIME BASE 235 h	I COTO ICARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	209.00 Hours
Factors	233 11			0.88934 [SYS 06140	01 8893/200 - System
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	288.15 Hours
Factors		TOUR TELESTITION TO	TE TOTT THINGS ON STATE STORMS		200.101110410
				0.88934 [SYS 06140	01 .88934200 - Svstem
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	337.06 Hours
Factors	379 h				
		1		0.88934 ISYS 06140	01 .88934200 - Svstem
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	69.37 Hours
Factors	78 hours				
		0000 51505011110	1/51011 1 1/01: 0 0: 1 1	0.88934 [SYS 06140	
750 Factors	STRAIGHT TIME BASE 340 h	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	302.38 Hours
raciors	3 340 11			0.88934 [SYS 06140	01 8893/200 - System
750	STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srys Steelworkers	Linear	116.50 Hours
Factors	•				1 10100 10010
				0.88934 [SYS 06140	01 .88934200 - Svstem
750	STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear	139.63 Hours
Factors	157 h				
				0.88934 ISYS 06140	l l
750	STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear	23.12 Hours
Factors	26 h				
750	STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 06140	01 .88934200 - System 139.63 Hours
Factors		I CU/U IPAINTERS	KETUH lindust/Site Srvs Steelworkers	Linear	139.63IH0urs
raciors	137 11			0.88934 [SYS 06140	01 88934200 - System
750	STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	238.34 Hours
Factors		T OUT OF THE	TE TOTT THINGS ON STATE STORMS		200.0 111 10010
				0.88934 [SYS 06140	01 .88934200 - Svstem
750	STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	75.59 Hours
Factors	s 85 h				
		T T			01 .88934200 - Svstem
750	STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	480.24 Hours
Factors	s 540 h				
				0.88934 ISYS 06140	01 .88934200 - Svstem

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Rocky Flats Closure Project Rasalina Cost and Rasis of Estimate

Baseline Devl Proiect WBS Filter 1EFB

		Baselille Cost al	iu Basis of Estillate	Activity Filter *	Starts In FY *
750 STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwor	kers Line	ar 92.49 Hours
Factors 104 h					
		-		0.88934	ISYS 0614001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H Indust/Site Srvs Steelwor	kers Line	ar 205.44 Hours
Factors 231 h					
				0.88934	ISYS 0614001 .88934200 - Svstem
A5C SUPPLIES	0000	NONE	C210S Facilities Mamt & Mainter	nance Line	ar 40.028.63 Dollars
Factors 44344.1 d		1.015 FY00 Escalation			
				0.88934	ISYS 0614001 .88934200 - Svstem
A5T TAXES	0000	NONE	C210S Facilities Mamt & Mainter	nance Line	ar 1.325.14 Dollars
Factors 1468 Dollars		1.015 FY00 Escalation			

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned

maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 160 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$269.11 average in this cluster

Unit Adjustment factor - This activity adjusted down by 8.1% per FCP 1999-8074

Revised Unit - \$247.31

Basis for adjustment - FY 99 FCP 1999-8074 representing productivity improvements over the project lifecycle.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50% Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

S Cost Element	Skill	Department	Curve	Ouantity Units
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	278.36 Hours
Factors 313 h				
			0.88934 [SYS 0614	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl.	Exp KE10H Indust/Site Srvs Steelworkers	Linear	289.04 Hours
Factors 325 h				
			0.88934 [SYS 0614	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	32.02 Hours
Factors 36 h				
			0.88934 [SYS 0614	001 .88934200 - Svstem
A5C SUPPLIES	0000 NONE	C210S Facilities Momt & Maintenance	Linear	4.447.62 Dollars
Factors 4927.12 h	1.015 FY00 Escalation			
			0.88934 [SYS 0614	001 .88934200 - Svstem
A5T TAXES	0000 NONE	C210S Facilities Mgmt & Maintenance	Linear	147.14 Dollars
Factors 163 dollars	1.015 FY00 Escalation			

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0.88934 [SYS 061400] .88934200 - System

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filter

Baseline Devl 1EFB

Starts In FY *

Line Item 5 - tH568102B10 - SSOC Support to Bldg 705

BOE

WBS No:

Activity ID:

Estimators Experience - One Year

Experience Item Desc - Custodial & SOE support to Bldg 705 from SSOC

Breakdown of Cost Data:

Item - Labor for one Fiscal Year, performing organization indicated services would be supplied on an over time basis only.

Units - Hours

1EFB12

1EFB0480

Unit Cost - \$48.81

Unit Cost Adjustment factor - None

Revised Unit Cost - None Basis for adjustment - None

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es		Cost Element Skill		Department	Curve	Ouantity	Units
	751	OVERTIME BASE & PRE.	L030 UTILITY WORKER	KE10H Indust/Site Srvs Steelworkers	Linear	364.41	Hours

Factors 409.75 H

0.88934 [SYS 061400] .88934200 - System

Line Item 5a - SSOC Support to Bldg 705

BOE

Estimators Experience - One Year

Experience Item Desc - Custodial & SOE support to Bldg 705 from SSOC

Breakdown of Cost Data:

Item - Labor for one Fiscal Year, performing organization indicated services would be supplied on an over time basis only.

Units - Hours

Unit Cost - \$48.81

Unit Cost Adjustment factor - None

Revised Unit Cost - None Basis for adjustment - None

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

ces	Skill Skill			Department	Curve	Quantity	Units		
	751	OVERTIME BASE & PRE.	L030	UTILITY WORKER	KE10H	Indust/Site Srvs Steelworkers	Linear	364.41	Hours

Factors 409.75 H

0.88934 [SYS 061400] .88934200 - System

Line Item SYS - Contingency And Escalation

BOE

Resources	Cost Element	Skill	Department	Curve	Quantity Units
	CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	18.143.02 Dollars
	Factors 18143.0 Dollars				
	ESC. ESCALATION	0000 NONE	ZDEPT No Department	Linear	8 284 08 Dollars

Factors 8284.08 Dollars

Activity ID: 1EFB0490 Description: 750 Cluster Landlord Functions, FY03 Cost Risk 2 Schedule Risk

Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
1	Corrective maintenance	1.00	each	НС	3.083	3.083	64.650	41.354	0	106.004	22.369	128.373
3	Preventive maintenance	1.00	each	HC	599	599	12.731	4.595	0	17.326	4.405	21.731
5 - tH568103B10	SSOC Support to Blda 705	1.00	each	EE	364	364	9.839	0	0	9.839	3.404	13.243
5a	SSOC Support to Blda 705	1.00	each	EE	364	364	9.839	0	0	9.839	3.404	13.243
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	48.837	48.837	0	48.837
	Tot	al for Activi	tv 1EFB049	0:		4.412	97.059	45.949	48.837	191.845	33.583	225.427

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, FRCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, Negotiated and was awarded the Site maintenance contract. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98(This data was derived from the MMS system), and the proposed value was applied to FY99. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the

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1EFB12 1EFB0490

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate Proiect Baseline Devl WBS Filter 1EFB Activity Filter *

Starts In FY *

MMS.

WBS No:

Activity ID:

·Approximately 142 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Ad hoc queries from the MMS and 002A and spending variance reports from the P&I Reporting system for Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$1872.34 average for this cluster

Unit Adjustment factor - This activity adjusted down by 8.1% per FCP 1999-8074

Revised Unit - \$1720.68

Basis for adjustment - FY 99 FCP 1999-8074 representing productivity improvements over the project lifecycle.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 32.31% (includes Linemen)

Cost Element

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

750	STRAIGH	T TIME BASE	C010	CARPENTERS	KE10H Indust/Site Srvs S	Steelworkers	Linear	209.00 Hours
Factors	235	h						
							0.88934 [SYS 061400	01 .88934200 - Svstem
750	STRAIGH	T TIME BASE	C010	CARPENTERS	KE10H Indust/Site Srvs S	Steelworkers	Linear	226.78 Hours
Factors	255	h						
		1		T			0.88934 [SYS 061400	
750		T TIME BASE	C010	CARPENTERS	KE10H Indust/Site Srvs S	Steelworkers	Linear	139.63 Hours
Factors	157	h						
							0.88934 ISYS 061400	
750		T TIME BASE	C020	ELECTRICIANS	KE10H Indust/Site Srvs S	Steelworkers	Linear	337.06 Hours
Factors	379	h						
				L			0.88934 [SYS 061400	
750		T TIME BASE	C020	ELECTRICIANS	KE10H Indust/Site Srvs S	Steelworkers	Linear	69.37 Hours
Factors	78	hours					0.00004 [0)/0.00440/	21 0000 1000 0 1
750	CTDAICH	T TIME BASE	0000	ELECTRICIANS	KE10H Indust/Site Srvs S	Stanting diame	0.88934 ISYS 061400	
750			C020	IELEC I RICIANS	KETUH IIndust/Site Sivs s	Steelworkers	Linear	302.38 Hours
Factors	340	h					0.88934 [SYS 061400	01 00004000 Custom
750	CTDAICH	T TIME BASE	C020	ELECTRICIANS	KE10H Indust/Site Srvs S	Stoolwarkora	0.88934 1515 061400 Linear	288.15 Hours
Factors		h	CUZU	IELECTRICIANS	RETUR IIIIGUSI/SILE SIVS S	Steetworkers	Lilledi	200.13100015
ruciors	324	11					0.88934 [SYS 061400	01 88934200 - System
750	STRAIGH	T TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srys S	Steelworkers	Linear	139.63 Hours
Factors		h	0010		THE TOTAL INCOME.	Stociwonicio	Linoui	100.00 110010
1 delors	101						0.88934 [SYS 061400	01 88934200 - System
750	STRAIGH	T TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs S	Steelworkers	Linear	23.12 Hours
Factors	•	h						
							0.88934 [SYS 061400	01 .88934200 - Svstem
750	STRAIGH	T TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs S	Steelworkers	Linear	116.50 Hours
Factors	131	h		·		·		
							0.88934 [SYS 061400	01 .88934200 - Svstem

Department

Curve

Units

Ouantity

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl

	Daseille Cost a	ilu basis di Estillate	Activity Filter *	Starts In FY *
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelwork	ers Linear	139.63 Hours
Factors 157 h				
			0.88934 [SYS 0614	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelwork	ers Linear	238.34 Hours
Factors 268 h				
			0.88934 [SYS 0614	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwork	ers Linear	92.49 Hours
Factors 104 h				
			0.88934 [SYS 0614	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwork	ers Linear	75.59 Hours
Factors 85 h				
			0.88934 [SYS 0614	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwork	ers Linear	480.24 Hours
Factors 540 h				
			0.88934 [SYS 0614	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL WORKE	KE10H Indust/Site Srvs Steelwork	ers Linear	205.44 Hours
Factors 231 h				
			0.88934 [SYS 0614	001 .88934200 - Svstem
A5C SUPPLIES	0000 NONE	C210S Facilities Mamt & Maintena	ance Linear	40.028.63 Dollars
Factors 44344.1 d	1.015 FY00 Escalation			
			0.88934 [SYS 0614	001 .88934200 - Svstem
A5T TAXES	0000 NONE	C210S Facilities Mgmt & Maintena	ance Linear	1,325.14 Dollars
Factors 1468 Dollars	1.015 FY00 Escalation			
			0.88934 [SYS 0614	00] .88934200 - System

Line Item 3 - Preventive maintenance

BOE

Preventive maintenance

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to

corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.
The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 160 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$269.11 average in this cluster

Unit Adjustment factor - This activity adjusted down by 8.1% per FCP 1999-8074

Revised Unit - \$247.31

Basis for adjustment - FY 99 FCP 1999-8074 representing productivity improvements over the project lifecycle.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50% Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es	Cost Element	Skill	Department	Curve	Quantity Units
	750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	278.36 Hours
	Factors 313 h				

0.88934 ISYS 0614001 .88934200 - System

WBS No: 1EFB12 **Rocky Flats Closure Project** Activity ID: 1EFB0490 Rasaline Cost and Rasis of Estimate Proiect Baseline Devl WBS Filter

1EFB

				Basellile Cost at	iu Dasis	o or Estimate	Activity Filter	*	Starts In FY *
750	STRAIGHT	TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	3	Linear	289.04 Hours
Factors	325	h							
								0.88934 [SYS 061400	01 .88934200 - Svstem
750	STRAIGH1	TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	3	Linear	32.02 Hours
Factors	36	h							
								0.88934 [SYS 061400	01 .88934200 - Svstem
A5C	SUPPLIES		0000	NONE	C210S	Facilities Mamt & Maintenand	ce	Linear	4.447.62 Dollars
Factors	4927.12	h		1.015 FY00 Escalation					
								0.88934 ISYS 061400	01 .88934200 - Svstem
A5T	TAXES		0000	NONE	C210S	Facilities Mamt & Maintenand	ce	Linear	147.14 Dollars
Factors	163	dollars		1.015 FY00 Escalation					
								0.88934 [SYS 061400	01 .88934200 - System

Line Item 5 - tH568103B10 - SSOC Support to Bldg 705

BOE

Estimators Experience - One Year

Experience Item Desc - Custodial & SOE support to Bldg 705 from SSOC

Breakdown of Cost Data:

Item - Labor for one Fiscal Year, performing organization indicated services would be supplied on an over time basis only.

Units - Hours

Unit Cost - \$48.81

Unit Cost Adjustment factor - None

Revised Unit Cost - none

Basis for adjustment - None

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resource

ces		Cost Element		Skill		Department	Curve	Ouantity	Units
	751	OVERTIME BASE & PRE.	L030	UTILITY WORKER	S100S	SSOC Salaried	Linear	364.41	Hours

Factors 409.75 H

0.88934 [SYS 061400] .88934200 - System

Line Item 5a - SSOC Support to Bldg 705

BOE

Estimators Experience - One Year

Experience Item Desc - Custodial & SOE support to Bldg 705 from SSOC

Breakdown of Cost Data:

Item - Labor for one Fiscal Year, performing organization indicated services would be supplied on an over time basis only.

Units - Hours

Unit Cost - \$48.81

Unit Cost Adjustment factor - None

Revised Unit Cost - none

Basis for adjustment - None

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resource

ces		Cost Element		Skill		Department	Curve	Quantity	Units
	751	OVERTIME BASE & PRE.	L030	UTILITY WORKER	S100S	SSOC Salaried	Linear	364.41	Hours

Factors 409.75 H

0.88934 [SYS 061400] .88934200 - System

Line Item SYS - Contingency And Escalation

BOE

Resources

es		Cost Element		Skill		Department	Curve	<i>Ouantity</i>	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	35.294.75	Dollars
	Factors	35294.8 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	13.541.89	Dollars

13541.9 Dollars

Activity ID: 1EFB0500 Description: 566 Cluster Landlord Functions, FY00 Line Item Description Quantity Units BOE Labor Labor Hours Labor Cost Materials/ Sub Contingency Total Prime Burden Cost & Escalation Cos	WBS No: 1EFB14		le: 566 Cluster Landle	ord								
	Activity ID: 1EFB	0500 Des	scription: 566 Cluster Landloi	rd Functions, FY00				Cost Risk	2 Schedule R	isk 1		
	Line Item		Description	Quantity	Units						Burden Cost	Total Cost

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Proiect Baseline Devl WBS Filter 1EFB

						Acti	vitv Filter *		Starts In FY *				
1	Corrective maintenance	1.00 each	HC	306	306	6.592	1.821	0	8.413	3.217	11.630		
3	Preventive maintenance	1.00 each	НС	52	52	1.130	202	0	1.332	551	1.883		
,		Total for Activity 1EFB0500:			357	7.722	2.024	0	9.746	3.768	13.514		

Line Item 1 - Corrective maintenance

1EFB14

1EFB0500

BOE

WBS No:

Activity ID:

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated and was awarded the site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 28 corrective/routine maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98 Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$789.78 average for this cluster

Unit Cost Adjustment factor - none

Revised Unit Cost - \$789.78 average for this cluster

Basis for adjustment - none

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 32.31% (includes Linemen)

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

S Cost Element	Skill	Department	Curve	Ouantity Units
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	21.39 Hours
	0.3612 May 2000 Earned		Lilleal	21.39[100]5
Factors 42.72 h	0.3612 May 2000 Earned	value Factor		
	T		1.38645 ISYS 06130	001 1.386448 - Target
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	19.75 Hours
Factors 39.44 h	0.3612 May 2000 Earned	Value Factor		
			1.38645 [SYS 06130	001 1.386448 - Target
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	13.17 Hours
Factors 26.29 h	0.3612 May 2000 Earned	Value Factor		
			1.38645 [SYS 06130	001 1.386448 - Target
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	28.50 Hours
Factors 56.92 h	0.3612 May 2000 Earned	Value Factor		
			1.38645 ISYS 06130	001 1.386448 - Target
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	27.24 Hours
Factors 54.4 h	0.3612 May 2000 Earned	Value Factor		
			1.38645 [SYS 06130	001 1.386448 - Target
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	31.81 Hours
Factors 63.53 h	0.3612 May 2000 Earned	Value Factor		
			1.38645 [SYS 0613	001 1.386448 - Target

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Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Activity Filter

Baseline Devl 1EFB

1EFB0500	Baseline Cos	st and Basis of Estimate	Activity Filter *	Starts In FY *
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers		6.59 Hours
Factors 13.15 H	0.3612 May 2000 Earned Valu	e Factor		
				13001 1.386448 - Target
750 STRAIGHT TIME BASE		Exp KE10H Indust/Site Srvs Steelworkers	Linear	2.19 Hours
Factors 4.38 h	0.3612 May 2000 Earned Valu	e Factor	1 39645 1979 061	13001 1.386448 - Target
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl.	Exp KE10H Indust/Site Srvs Steelworkers	1.36043 13 13 00 1 S Linear	13.17 Hours
Factors 26.29 h	0.3612 May 2000 Earned Valu			101111110010
				13001 1.386448 - Target
750 STRAIGHT TIME BASE		Exp KE10H Indust/Site Srvs Steelworkers	Linear	10.97 Hours
Factors 21.91 h	0.3612 May 2000 Earned Valu	e Factor	4 20045 1000 004	100014 000440 T+
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers		13001 1.386448 - Target 13.17 Hours
Factors 26.29 h	0.3612 May 2000 Earned Valu		Lilleal	13.171110013
				13001 1.386448 - Target
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	22.49 Hours
Factors 44.91 h	0.3612 May 2000 Earned Valu	e Factor		
				13001 1.386448 - Target
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	8.78 Hours
Factors 17.53 h	0.3612 May 2000 Earned Valu	e Factor	1 38645 (575 061	13001 1.386448 - Target
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers		7.13 Hours
Factors 14.24 h	0.3612 May 2000 Earned Valu			
				1300] 1.386448 - Target
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	45.36 Hours
Factors 90.57 H	0.3612 May 2000 Earned Valu	e Factor	4 00045 - 101/0 004	10001 4 000440 T
750 STRAIGHT TIME BASE	COOL STRUCTURAL AND METAL WOR	RKE KE10H Indust/Site Srvs Steelworkers		1300] 1.386448 - Target 19.38 Hours
Factors 38.7 h	0.3612 May 2000 Earned Valu		Lilleai	19.30 10015
1 40075 30.1	0.0012 May 2000 Earnou Valu	0 1 40.01	1.38645 [SYS 061	1300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	0.66 Hours
Factors 1.31 H	0.3612 May 2000 Earned Valu	e Factor		
				13001 1.386448 - Target
751 OVERTIME BASE & PRE. Factors 2.14 H	C010 CARPENTERS 0.3612 May 2000 Earned Valu	KE10H Indust/Site Srvs Steelworkers	S Linear	1.07 Hours
Factors 2.14 H	0.3612 May 2000 Earned Valu	e Factor	1 38645 ISVS 061	13001 1.386448 - Target
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers		
Factors 1.97 H	0.3612 May 2000 Earned Valu			
				13001 1.386448 - Target
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	0.33 Hours
Factors 0.66 H	0.3612 May 2000 Earned Valu	e Factor	4 000 45 10 40 00 4	
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers		13001 1.386448 - Target 1.36 Hours
Factors 2.72 H	0.3612 May 2000 Earned Valu		Linear	1.30Inouis
	5.5512 Way 2000 Lanted Valu		1.38645_ ISYS 061	13001 1.386448 - Target
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	1.59 Hours
Factors 3.18 H	0.3612 May 2000 Earned Valu			
				13001 1.386448 - Target
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	1.43 Hours
Factors 2.85 H	0.3612 May 2000 Earned Valu	e Factor	4 00045 1000 004	12001 4 200440 T '
			1.38645 [SYS 061	1300] 1.386448 - Target

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl 1EFB

	Baseline Cos	t and Basis of Estimate Activity Filter	*	Starts In FY *
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl f	Exp KE10H Indust/Site Srvs Steelworkers	Linear	0.66 Hours
Factors 1.31 H	0.3612 May 2000 Earned Value	Factor		•
			1.38645 [SYS 06130	01 1.386448 - Target
751 OVERTIME BASE & PRE.		Exp KE10H Indust/Site Srvs Steelworkers	Linear	0.55 Hours
Factors 1.1 H	0.3612 May 2000 Earned Value	Factor		
			1.38645 [SYS 06130	
751 OVERTIME BASE & PRE.		Exp KE10H Indust/Site Srvs Steelworkers	Linear	0.11 Hours
Factors 0.22 H	0.3612 May 2000 Earned Value	e Factor	4 00045 1000 00400	01.4.000440 T
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	1.38645 [SYS 06130] Linear	0.66 Hours
Factors 1.31 H	0.3612 May 2000 Earned Value		Lilledi	0.00IFIOUIS
1.51	0.3012 Way 2000 Lamed Value	a l'actor	1.38645 [SYS 06130	0] 1 386448 - Target
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	1.13 Hours
Factors 2.25 H	0.3612 May 2000 Earned Value	e Factor		
			1.38645 [SYS 06130	01 1.386448 - Target
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	0.44 Hours
Factors 0.88 H	0.3612 May 2000 Earned Value	Factor		
			1.38645 [SYS 06130	
751 OVERTIME BASE & PRE.	C080 IPLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	2.27 Hours
Factors 4.53 H	0.3612 May 2000 Earned Value	Factor	4 000 45 (0) (0 00 400)	0] 4 000440 T
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	1.38645 [SYS 06130] Linear	0.36 Hours
Factors 0.71 H	0.3612 May 2000 Earned Value		Lilleai	0.30 110015
1 40013 0.71	0.0012 Way 2000 Earrica Value	, 1 40101	1.38645 [SYS 06130	0] 1 386448 - Target
751 OVERTIME BASE & PRE.	C090 STRUCTURAL AND METAL WORL	KE KE10H Indust/Site Srvs Steelworkers	Linear	0.97 Hours
Factors 1.94 H	0.3612 May 2000 Earned Value	Factor		
			1.38645 [SYS 06130	0] 1.386448 - Target
A5C SUPPLIES	0000 NONE	C210S Facilities Mgmt & Maintenance	Linear	1,757.65 Dollars
Factors 1.015 FY00 Escalation	3457.93 d	0.3612 May 2000 Earned Value Factor		
			1.38645 [SYS 06130	
A5T TAXES	0000 NONE	C210S Facilities Momt & Maintenance	Linear	63.54 Dollars
Factors 1.015 FY00 Escalation	125 dollars	0.3612 May 2000 Earned Value Factor	4 00045 1000 00400	01.4.000440 T
			1.38645 [SYS 06130	UI 1.386448 - Target

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 35 preventative maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Data Source - MMS and P&I Reporting System SVAR for FY98
Item Desc - Fiscal Year Preventive Maintenance
Breakdown of Data:
Item - Preventive maintenance
Units - Work Packages
Unit Cost - \$102.74 average in this cluster
Unit Cost Adjustment factor - none
Revised Unit Cost - \$102.74 average in this cluster
Basis for adjustment - none

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Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Activity Filter Baseline Devl 1EFB

Starts In FY

The percentage of maintenance effort (labor Type) required is as follows:

50.00% (includes Linemen)

37.50% Maint. Mech Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

;	Cost Element		Skill		Department	Curve	Ouantity	Units
750	STRAIGHT TIME BASE	C020 E	LECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	26.33	Hours
Factors	52.58 h		0.3612 May 2000 Earned Value Fac	ctor				
						1.38645 [SYS 06130	001 1.386448 - T	arget
750	STRAIGHT TIME BASE	C040 N	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	19.75	Hours
Factors	39.44 h		0.3612 May 2000 Earned Value Fac	ctor				
						1.38645 [SYS 06130	001 1.386448 - T	arget
750	STRAIGHT TIME BASE	C080 P	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.01	Hours
Factors	6.02 h		0.3612 May 2000 Earned Value Fac	ctor				
						1.38645 [SYS 06130	001 1.386448 - T	arget
751	OVERTIME BASE & PRE.	C020 E	LECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.32	Hours
Factors	2.63 h		0.3612 May 2000 Earned Value Fac	ctor				
_						1.38645 [SYS 06130	001 1.386448 - T	arget
751	OVERTIME BASE & PRE.	C040 N	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.99	Hours
Factors	1.97 h		0.3612 May 2000 Earned Value Fac	ctor				
						1.38645 [SYS 06130	001 1.386448 - T	arget
751	OVERTIME BASE & PRE.	C080 P	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.15	Hours
Factors	0.3 h		0.3612 May 2000 Earned Value Fac	ctor				
_						1.38645 [SYS 06130	001 1.386448 - T	arget
A5C	SUPPLIES	0000 N	NONE	C210S	Facilities Mamt & Maintenance	Linear	195.29	Dollars
Factors	1.015 FY00 Escalation		384.21 d		0.3612 May 2000 Earned Value Factor			
						1.38645 [SYS 06130	001 1.386448 - T	arget
A5T	TAXES	0000 N	NONE	C210S	Facilities Mamt & Maintenance	Linear	7.12	Dollars
Factors	1.015 FY00 Escalation		14 Dollars		0.3612 May 2000 Earned Value Factor			

Activity ID: 1EFB0505

1.38645 [SYS 061300] 1.386448 - Target

2 Schedule Risk Contingency Line Item Description Quantity Units BOELabor Labor Hours Labor Cost Materials/ Sub Total Prime Burden Cost Total Cost Type Hours/Unit Total **Total** Cost & Escalation Cost Corrective maintenance 1.00 each HC 543 543 11.707 3.234 0 14.941 5.584 20.526 1.00 each HC 92 92 2.006 359 0 2.366 957 3.323 Preventive maintenance SYS Contingency And Escalation 1.00 ea EE 0 0 0 1.262 1.262 0 1.262 Total for Activity 1EFB0505: 634 13.713 3.594 1 262 18.569 6.541 25.110

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated and was awarded the site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 28 corrective/routine maintenance work actions are expected.

Description: 566 Cluster Landlord Functions, FY01

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

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Cost Risk

WBS No: 1EFB14 Rocky Flats Clo
Activity ID: 1EFB0505 Baseline Cost and B

Rockv Flats Closure Proiect

Baseline Cost and Basis of Estimate

Proiect
WBS Filter
1EFB
Activity Filter
*

Starts In FY *

Unit Cost - \$789.78 average for this cluster Unit Cost Adjustment factor - none

Revised Unit Cost - \$789.78 average for this cluster

Basis for adjustment - none

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 32.31% (includes Linemen)

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

г								
s_		Cost Element	Skill		Department	Curve	Quantity	Units
L		STRAIGHT TIME BASE	C010 CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	37.99	Hours
F	Factors	42.72 h						
Г		OTD 410117 TH 45 D 4 0 5	0040 0400547500	1/5 / 61 /		0.88934 [SYS 0614		
Ļ		STRAIGHT TIME BASE	C010 CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	35.08	Hours
F	Factors	39.44 h				0.00024 [6V6.064	4001 00034300	Cuatam
Г	750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	0.88934 [SYS 0614 Linear		Hours
E	Factors	26.29 h	1 COTO ICANFENTENS	KL IVII	IIIIdds//Site Sivs SteelWorkers	Lilleal	23.30	ii iouis
1	uciors	20.29 11				0.88934 [SYS 0614	4001 88934200 - :	System
	750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear		Hours
F	Factors	63.53 h						
						0.88934 [SYS 0614	400] .88934200 -	System
	750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	11.69	Hours
F	Factors	13.15 H						
_				I	Г	0.88934 [SYS 0614		
L	750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	48.38	Hours
F	Factors	54.4 h						
		1	1			0.88934 [SYS 0614		
L	750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	50.62	Hours
F	Factors	56.92 h						
	750	OTDAIGUT TIME DAGE	OO40 MAINTENANOE MAQUINIOT (; LE	1/54011	1 1 1/0: 0 0: 1	0.88934 [SYS 0614		
,	750	STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H	lindust/Site Srvs Steelworkers	Linear	19.49	Hours
F	Factors	21.91 h				0.88934 [SYS 0614	4001 00024200	Cuatam
	750	STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	VE10U	Indust/Cita Crya Stackwarkara	0.88934 ISTS 0814 Linear		Hours
E	Factors	4.38 h	1 C040 IMAINTENANCE MACHINIST (IIICI EXD	KETUH	IIIdus/Site Sivs Steelworkers	Lilleal	3.90	IDOUIS
I	uciors	4.30				0.88934 ISYS 0614	4001 88934200 -	System
	750	STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KF10H	Indust/Site Srys Steelworkers	Linear		Hours
F	Factors	26.29 h		- IXE 1011	IIII GOVORO OTO OTO OTO OTO		20.00	ii iodio
						0.88934 [SYS 0614	4001 .88934200 - 3	Svstem
	750	STRAIGHT TIME BASE	C070 PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear		Hours
F	Factors	26.29 h						
_				,		0.88934 [SYS 0614	4001 .88934200 -	Svstem
L	750	STRAIGHT TIME BASE	C070 PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	39.94	Hours
F	Factors	44.91 h						
				ı		0.88934 [SYS 0614		
L		STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	12.66	Hours
F	Factors	14.24 h						_
_						0.88934 [SYS 0614	400] .88934200 -	System

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WBS No: 1EFB14 1EFB0505 Activity ID:

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter 1E
Activity Filter *

Baseline Devl 1EFB

1EFB0505	Raseline Lost and Basis of Estimate	3S Filter 1EFB tivity Filter * Starts In FY *
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers	Linear 80.55 Hours
Factors 90.57 H		0.00024 [CVC.004.400] 00024200 Custom
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers	0.88934
Factors 17.53 h		
750 STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL WORKE KE10H Indust/Site Srys Steelworkers	0.88934 ISYS 0614001 .88934200 - System Linear 34.42 Hours
750 STRAIGHT TIME BASE Factors 38.7 h	CU90 ISTRUCTURAL AND METAL WORKE RETURN IIII GUSVSILE SIVS SIEE WOLKEIS	Lineal 34.42inouis
		0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C010 CARPENTERS KE10H Indust/Site Srvs Steelworkers	Linear 1.75 Hours
Factors 1.97 H		0.88934 ISYS 0614001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C010 CARPENTERS KE10H Indust/Site Srvs Steelworkers	Linear 1.17 Hours
Factors 1.31 H		
751 OVERTIME BASE & PRE.	C010 CARPENTERS KE10H Indust/Site Srys Steelworkers	0.88934
Factors 2.14 H	I COTO IOMNELINTENO I NETUN IIIIUUSVOILE STVS SIEEIWOIKEIS	Linear 1.90lHours
		0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS KE10H Indust/Site Srvs Steelworkers	Linear 2.53 Hours
Factors 2.85 H		0.88934 ISYS 0614001 .88934200 - System
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS KE10H Indust/Site Srvs Steelworkers	Linear 2.83 Hours
Factors 3.18 H		
754 OVEDTIME DAGE 9 DDE	C020 ELECTRICIANS KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400] .88934200 - System Linear 0.59 Hours
751 OVERTIME BASE & PRE. Factors 0.66 H	C020 ELECTRICIANS KE10H Indust/Site Srvs Steelworkers	Linear 0.59 Hours
0.00		0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS KE10H Indust/Site Srvs Steelworkers	Linear 2.42 Hours
Factors 2.72 H		0.88934 [SYS 061400] .88934200 - Şystem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers	U.00934 1313 0014001 .00934200 - 3ystem Linear 0.98 Hours
Factors 1.1 H		
		0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE. Factors 0.22 H	C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers	Linear 0.20 Hours
U.ZZ II		0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers	Linear 1.17 Hours
Factors 1.31 H		0.00004 [00/0.004400] 00004000 00004000
751 OVERTIME BASE & PRE.	C070 PAINTERS KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400] .88934200 - System Linear 1.17 Hours
Factors 1.31 H		201531
		0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE. Factors 2.25 H	C070 PAINTERS KE10H Indust/Site Srvs Steelworkers	Linear 2.00 Hours
actors Z.20 H		0.88934 [SYS 0614001.88934200 - System
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers	Linear 0.78 Hours
Factors 0.88 H		
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srys Steelworkers	0.88934
Factors 0.71 H	1 COOC IL FOINDEILO VIAN LILETTI I LEVO I VE IOU IIIIOOSNOIG 21/2 21661MOIKEIS	Lilicai U.03IFIOUIS
		0.88934 [SYS 061400] .88934200 - System

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter

Baseline Devl 1EFB

		Daseille Cost al	id Dasis of Estimate	Activity Filter *	Starts In FY *
751 OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworke	ers Linear	4.03 Hours
Factors 4.53 H					
				0.88934 [SYS 0	614001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H Indust/Site Srvs Steelworke	ers Linear	1.73 Hours
Factors 1.94 H					
				0.88934 [SYS 0	614001 .88934200 - Svstem
A5C SUPPLIES	0000	NONE	C210S Facilities Mamt & Maintena	nce Linear	3.121.41 Dollars
Factors 3457.93 d		1.015 FY00 Escalation			
				0.88934 [SYS 0	614001 .88934200 - Svstem
A5T TAXES	0000	NONE	C210S Facilities Mamt & Maintena	nce Linear	112.84 Dollars
Factors 1.015 FY00 Escalation		125 Dollars			
				0.88934 [SYS 0	61400] .88934200 - System

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 35 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98 Item Desc - Fiscal Year Preventive Maintenance Breakdown of Data:

Item - Preventive maintenance
Units - Work Packages

Unit Cost - \$102.74 average in this cluster

Unit Cost Adjustment factor - none

Revised Unit Cost - \$102.74 average in this cluster

Basis for adjustment - none

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50% Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

S	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	46.76	Hours
Factors	52.58 h							
						0.88934 ISYS 06140	001 .88934200 - 3	Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	35.08	Hours
Factors	39.44 h							
						0.88934 [SYS 06140	001 .88934200 - 3	Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.35	Hours
Factors	6.02 h							
						0.88934 [SYS 06140	001 .88934200 - 3	Svstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.34	Hours
Factors	2.63 h							
						0.88934 [SYS 06140	001 .88934200 - 3	Svstem
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.75	Hours
Factors	1.97 h							
						0.88934 [SYS 06140	001 .88934200 - 3	Svstem

WBS No: 1EFB14 Rocky Flats Closure Project Project Baseline Devl Activity ID: 1EFB0505 Baseline Cost and Basis of Estimate Baseline Devl WBS Filter 1EFB

						Activity Filter	*	Starts In FY
751	OVERTIME BASE & PRE.	C080	PLUMBER	S AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.27 Hours
Factors	0.3 h							
							0.88934 [SYS 06140	01 .88934200 - Svstem
A5C	SUPPLIES	0000	NONE		C210S	Facilities Mgmt & Maintenance	Linear	346.82 Dollars
Factors	1.015 FY00 Escalation		384.21	d				
							0.88934 [SYS 06140	01 .88934200 - Svstem
A5T	TAXES	0000	NONE		C210S	Facilities Momt & Maintenance	Linear	12.64 Dollars
Factors	1.015 FY00 Escalation		14	Dollars				

0.88934 [SYS 061400] .88934200 - System

Line Item SYS - Contingency And Escalation

BOE

Resources

es		Cost Element		Skill		Department	Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	760.10	Dollars
	Factors	760.103 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	501.48	Dollars

Factors 501.477 Dollars

Activity ID: 1EFB0510 Description: 566 Cluster Landlord Functions, FY02 Cost Risk 2 Schedule Risk

										· ·		
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
1	Corrective maintenance	1.00	each	HC	543	543	11.707	3.234	0	14.941	4.133	19.074
3	Preventive maintenance	1.00	each	HC	92	92	2.006	356	0	2.362	708	3.070
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	3.301	3.301	0	3.301
Total for Activity 1EFB0510:):		634	13.713	3.590	3.301	20.605	4.841	25.445

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated and was awarded the site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 28 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$789.78 average for this cluster

Unit Cost Adjustment factor - none

Revised Unit Cost - \$789.78 average for this cluster

Basis for adjustment - none

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

32.31% (includes Linemen)

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08%

Electrician

Pipefitter 23.089 Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources Cost Element Skill Department Curve Quantity Units

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filte

Baseline Devl 1EFB *

Daseille Cos	Activity F	"ilter * Starts In FY *
C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 23.38 Hours
		0.88934 [SYS 061400] .88934200 - System
C010 ICARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 37.99 Hours
		0.88934 ISYS 0614001 .88934200 - System
C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 35.08 Hours
Cook ELECTRICIANO	1/5/01/ 1 / 1/01/ 0 0 1 /	0.88934 [SYS 061400] .88934200 - System
I C020 IELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 11.69lHours
		0.88934 [SYS 061400] .88934200 - System
C020 FLECTRICIANS	KE10H Indust/Site Srys Steelworkers	Linear 48.38 Hours
1 OVEN TELEVITATION AND	THE TOTAL HIMMONOTO STATE STORY STATE OF THE	
		0.88934 [SYS 061400] .88934200 - System
C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 56.50 Hours
COOO ELECTRICIANO	KEAOLI Is dust/Oits On a Otsshundure	0.88934
1 CU20 IELECTRICIANS	KETUH lindust/Site Srvs Steelworkers	Linear 50.62iHours
		0.88934 [SYS 061400] .88934200 - System
C040 MAINTENANCE MACHINIST (incl I	Exp KE10H Indust/Site Srvs Steelworkers	Linear 23.38 Hours
		0.88934 [SYS 061400] .88934200 - System
C040 MAINTENANCE MACHINIST (incl i	Exp KE10H Indust/Site Srvs Steelworkers	Linear 19.49 Hours
		0.00004 [0)/0.0044001 00004000 0
CO40 MAINTENANCE MACHINIST (incl.)	Evn KE10H Indust/Site Style Steelworkers	0.88934 [SYS 061400] .88934200 - System Linear 3.90 Hours
1 CO40 MAINTENANCE MACHINIOT (INCI-	LAD NE 1011 Illidust/Oile 51V3 SteetWorkers	Linear 5.30 Flours
		0.88934 [SYS 061400] .88934200 - System
C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear 39.94 Hours
1		0.88934 [SYS 061400] .88934200 - System
I C070 IPAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear 23.38 Hours
		0.88934 [SYS 061400] .88934200 - System
C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srys Steelworkers	Linear 15.59lHours
		200000000000000000000000000000000000000
		0.88934 [SYS 061400] .88934200 - System
C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear 80.55 Hours
COOL DILIMPEDO AND DIDEFITTEDO	I/F4011 In direct/City Cours Observed and	0.88934
1 C080 IPLUMBERS AND PIPEFITTERS	KETUH IIndust/Site Srvs Steelworkers	Linear 12.66lHours
		0.88934 [SYS 061400] .88934200 - System
C090 STRUCTURAL AND METAL WOR	KE KE10H Indust/Site Srvs Steelworkers	Linear 34.42 Hours
C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400] .88934200 - System Linear 1.17 Hours
	C010 CARPENTERS C010 CARPENTERS C010 CARPENTERS C020 ELECTRICIANS C020 ELECTRICIANS C020 ELECTRICIANS C020 ELECTRICIANS C040 MAINTENANCE MACHINIST (incl. B) C040 MAINTENANCE MACHINIST (incl. B) C040 MAINTENANCE MACHINIST (incl. B) C070 PAINTERS C070 PAINTERS C080 PLUMBERS AND PIPEFITTERS C080 PLUMBERS AND PIPEFITTERS	C010 CARPENTERS KE10H Indust/Site Srvs Steelworkers C010 CARPENTERS KE10H Indust/Site Srvs Steelworkers KE10H Indust/Site Srvs Steelworkers KE10H Indust/Site Srvs Steelworkers KE10H Indust/Site Srvs Steelworkers C020 ELECTRICIANS KE10H Indust/Site Srvs Steelworkers KE10H Indust/Site Srvs Steelworkers C020 ELECTRICIANS KE10H Indust/Site Srvs Steelworkers C020 ELECTRICIANS KE10H Indust/Site Srvs Steelworkers C020 ELECTRICIANS KE10H Indust/Site Srvs Steelworkers C020 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers C040 PAINTERS KE10H Indust/Site Srvs Steelworkers C070 PAINTERS KE10H Indust/Site Srvs Steelworkers C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl 1EFB

	baseline C	OST and Basis of Estimate Activity Fil	ter * Starts In FY *
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 1.90 Hours
Factors 2.14 H			
TEL OVERTIME BASE & BBE	OCAC CARRENTERS		0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 1.75lHours
Factors 1.97 H			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 0.59lHours
Factors 0.66 H		THE TOTAL MINERAL CONTROL OF THE CON	500010310
			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 2.83 Hours
Factors 3.18 H			
754 OVEDTIME DAGE & DDE	Occo ELECTRICIANO	1/54011 1 1 1/0% 0 00 1 1	0.88934 [SYS 0614001.88934200 - System
751 OVERTIME BASE & PRE. Factors 2.85 H	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 2.53 Hours
racions 2.00 II			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 2.42 Hours
Factors 2.72 H			
			0.88934
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (in	cl Exp KE10H Indust/Site Srvs Steelworkers	Linear 0.98 Hours
Factors 1.1 H			0.0004 101/0.001/0.001
751 OVERTIME BASE & PRE.	COAO MAINTENANCE MACHINIST (in	acl Exp KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE. <i>Factors</i> 0.22 H	C040 IMAINTENANCE MACHINIST (III	ICLEXP RETUR INQUST/SITE SIVE STEELWORKERS	Linear 0.20 Hours
racions 0.22 II			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (in	ncl Exp KE10H Indust/Site Srvs Steelworkers	Linear 1.17 Hours
Factors 1.31 H			
			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear 2.00 Hours
Factors 2.25 H			
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400] .88934200 - System Linear 1.17 Hours
Factors 1.31 H	I CU/U IPAINTERS	RETURN IIII IIII IIII III III III III III II	Linear 1.171Hours
rations 1.51 II			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	S KE10H Indust/Site Srvs Steelworkers	Linear 4.03 Hours
Factors 4.53 H			
			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear 0.63 Hours
Factors 0.71 H			
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	S KE10H Indust/Site Srvs Steelworkers	0.88934
Factors 0.88 H	1 C080 IPLUMBERS AND PIPEFITTERS	S KE10H Indust/Site Srvs Steelworkers	Linear 0.781Hours
Tuctors 0.00 11			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C090 STRUCTURAL AND METAL WO	ORKE KE10H Indust/Site Srvs Steelworkers	Linear 1.73 Hours
Factors 1.94 H			
			0.88934 [SYS 061400] .88934200 - System
A5C SUPPLIES	0000 NONE	C210S Facilities Mamt & Maintenance	Linear 3.121.41 Dollars
Factors 1.015 FY00 Escalation	3457.93 d		
AST TAYED	anna NONE	00400 5 355 M	0.88934 [SYS 061400] .88934200 - System
A5T TAXES Fractions 1.015 EVO0 Equalation	0000 NONE	C210S Facilities Momt & Maintenance	Linear 112.84 Dollars
Factors 1.015 FY00 Escalation	125 Dollars		0.88934 [SYS 061400] .88934200 - System
Nanana 41 an ann i atamana a			0.00304 0 1 0 00 1 4 00 .00304 2 00 - System

Line Item 3 - Preventive maintenance

BOE Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Baseline Devl WBS Filter 1EFB

WBS Filter 1EFB
Activity Filter *

* Starts In FY *

Units

corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 35 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$102.74 average in this cluster

Unit Cost Adjustment factor - none

Revised Unit Cost - \$102.74 average in this cluster

Basis for adjustment - none

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Cost Element

Maint. Mech 37.50%

Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	46.76 Hours
Factors 52.58 h				
			0.88934 [SYS 06140	01 .88934200 - Svstem
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (ir	ncl Exp KE10H Indust/Site Srvs Steelworkers	Linear	35.08 Hours
Factors 39.44 h				
			0.88934 ISYS 06140	01 .88934200 - Svstem
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	S KE10H Indust/Site Srvs Steelworkers	Linear	5.35 Hours
Factors 6.02 h				
				01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	2.34 Hours
Factors 2.63 h				
				01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	I C040 IMAINTENANCE MACHINIST (ir	ncl Exp KE10H Indust/Site Srvs Steelworkers	Linear	1.75 Hours
Factors 1.97 h				
OVEDTIME DAGE & DDE	T cook by the person with properties.	0 1/5/01/ 1 1/01/ 0 0/ 1 1		01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	S KE10H Indust/Site Srvs Steelworkers	Linear	0.27 Hours
Factors 0.3 h			0.00004 [0.00.00440	01 00004000 0
A5C SUPPLIES	0000 NONE	C210S Facilities Mgmt & Maintenance	0.88934 ISYS 06140 Linear	01 .88934200 - Svstem 346.82 Dollars
		C2105 Facilities Maint & Maintenance	Linear	346.82ID0IIaIS
Factors 1.015 FY00 Escalation	384.21 d		0.00024 [6V6.06440	01 00024200 System
A5T TAXES	0000 NONE	C210S Facilities Mgmt & Maintenance	U.88934 1515 06140	01 .88934200 - System
	10 Dollars	CZTOS TRACIILLES MOME & Maintenance	Linear	9.03 Dollars
Factors 1.015 FY00 Escalation	TO Dollars		0.00034 [676.06140	01 .88934200 - Svstem
			0.00934 515 00140	UI .009342UU - 37SIEIII

Line Item SYS - Contingency And Escalation

BOE

Resources

rces	S Cost Element Skill		Department	Curve	Quantity	Units
	CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	2,266.39	Dollars
	Factors 2266 20 Dollars					

WBS No: 1EFB14 Rocky Flats Closure Project Baseline Devl
Activity ID: 1EFB0510 Baseline Cost and Basis of Estimate WBS Filter 1EFB

ESC ESCALATION 0000 NONE ZDEPT No Department Linear 1.034.83 Dollars

Factors 1034.83 Dollars

WBS No: 1EFB1	15 <u>Title:</u> Site Services Cluster Land	lord										
Activity ID: 1EF	B0515 Description: Site Services Cluster Landlo	rd Funtions	s, FY00					Cost Risk	2 Schedule R	Risk 1		
Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Corrective maintenance	1.00	each	HC	11	11	244	65	0	309	119	428
1a	Corrective maintenance	1.00	each	HC	506	506	10.921	2.912	0	13.833	5.329	19.162
1b	Corrective maintenance	0.65	each	HC	869	565	12.217	4.125	0	16.342	5.962	22.304
3	Preventive maintenance	1.00	each	HC	2	2	42	7	0	49	20	69
3a	Preventive maintenance	1.00	each	HC	85	85	1.872	324	0	2.195	913	3.109
3b	Preventive maintenance	0.65	each	HC	187	121	2.657	459	0	3.116	1.297	4.413
Total for Activity 1EFB0515:					1.291	27.952	7.892	0	35.844	13.641	49.485	

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 1 corrective/routine maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$818 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99

Basis for adjustment - None.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 32.31% (includes Linemen)

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

s			Cost Element		Skill	Department	Curve	Ouantity	Units
	750	STRAIGH	T TIME BASE	C010	CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	0.73	Hours
	Factors	1.46	h		0.3612 May 2000 Earned Value Fa	ctor			

				1.38645 545 061300	JJ 1.386448 - Target
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	0.79 Hours
Factor	s 1.58 h	0.3612 May 2000 Earned Valu	ue Factor		

				•			1.38645 [SY	S 061300] 1.386448 - Target
750	STRAIGHT 1	TIME BASE	C010 C	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.49 Hours
Factors	0.97	h		0.3612 May 2000 Earned Value Fac	tor			
							1.38645 [SY	S 0613001 1.386448 - Target

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Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Ba
WBS Filter 1E
Activity Filter *

Baseline Devl 1EFB

Baseline Cost and Basis of Estimate	WBS Filter 1EFB Activity Filter * Starts In FY *
C020 ELECTRICIANS KE10H Indust/Site Srvs Steelwor	
0.3612 May 2000 Earned Value Factor	
	1.38645 [SYS 061300] 1.386448 - Target
	rkers Linear 1.01Hours
0.3012 IVIAY 2000 Earried Value Factor	1.38645 [SYS 061300] 1.386448 - Target
C020 ELECTRICIANS KE10H Indust/Site Srvs Steelwor	
0.3612 May 2000 Earned Value Factor	
	1.38645 [SYS 061300] 1.386448 - Target
	rkers Linear 0.25lHours
0.3612 May 2000 Earned Value Factor	1.38645 ISYS 0613001 1.386448 - Target
C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelwor	
0.3612 May 2000 Earned Value Factor	
	1.38645 [SYS 061300] 1.386448 - Target
	rkers Linear 0.41 Hours
0.3612 May 2000 Earned Value Factor	1.38645 [SYS 061300] 1.386448 - Target
C040 MAINTENANCE MACHINIST (incl Exp. KE10H Indust/Site Srys Steelwo	
0.3612 May 2000 Earned Value Factor	2010/2010
	1.38645 [SYS 061300] 1.386448 - Target
	rkers Linear 0.49 Hours
0.3612 May 2000 Earned Value Factor	4 000 45
COZO DAINTERS KE10H Indust/Site Save Steeling	1.38645 [SYS 061300] 1.386448 - Target rkers Linear 0.83 Hours
	IKEIS LIIIEAI 0.83 FIOUIS
0.0012 May 2000 Earnor Value Factor	1.38645 [SYS 061300] 1.386448 - Target
C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelwor	rkers Linear 1.68 Hours
0.3612 May 2000 Earned Value Factor	
	1.38645 [SYS 061300] 1.386448 - Target
	rkers Linear 0.33lHours
0.3612 May 2000 Earned Value Factor	1.38645 [SYS 061300] 1.386448 - Target
C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelwo	
0.3612 May 2000 Earned Value Factor	
	1.38645 [SYS 061300] 1.386448 - Target
	rkers Linear 0.72lHours
0.3612 May 2000 Earned Value Factor	1.38645 [SYS 061300] 1.386448 - Target
C010 CARPENTERS KD10H 776 Complex Steelworks	
	is Lineal 0.03ir louis
	1.38645 [SYS 061300] 1.386448 - Target
C010 CARPENTERS KE10H Indust/Site Srvs Steelwor	rkers Linear 0.04 Hours
0.3612 May 2000 Earned Value Factor	
COAO CARDENTERO	1.38645 [SYS 061300] 1.386448 - Target
	rkers Linear 0.04lHours
0.3012 IVIAY 2000 EATHER VALUE FACIOI	
	1 38645 [SYS 061300] 1 386448 - Target
C020 ELECTRICIANS KE10H Indust/Site Srvs Steelwor	1.38645 [SYS 061300] 1.386448 - Target rkers Linear 0.05 Hours
	C020 ELECTRICIANS

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WBS No: Activity ID:

1EFB15 1EFB0515

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Austrian Tile Baseline Devl 1EFB

	Daseille O	Activity Filter	*	Starts In FY *
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	0.01 Hours
Factors 0.02 h	0.3612 May 2000 Earned Va	lue Factor		
			1.38645 [SYS 06130	
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	0.06 Hours
Factors 0.11 h	0.3612 May 2000 Earned Va	lue Factor		
			1.38645 [SYS 06130	
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	0.06 Hours
Factors 0.12 h	0.3612 May 2000 Earned Va	lue Factor		
			1.38645 [SYS 06130	
751 OVERTIME BASE & PRE.		cl Exp KE10H Indust/Site Srvs Steelworkers	Linear	0.03 Hours
Factors 0.05 h	0.3612 May 2000 Earned Va	lue Factor		
			1.38645 [SYS 06130	
751 OVERTIME BASE & PRE.		cl Exp KE10H Indust/Site Srvs Steelworkers	Linear	0.01 Hours
Factors 0.01 h	0.3612 May 2000 Earned Va	lue Factor		
			1.38645 ISYS 06130	
751 OVERTIME BASE & PRE.		cl Exp KE10H Indust/Site Srvs Steelworkers	Linear	0.02 Hours
Cactors 0.04 h	0.3612 May 2000 Earned Va	lue Factor		
			1.38645 ISYS 06130	
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	0.03 Hours
Factors 0.05 h	0.3612 May 2000 Earned Va	lue Factor		
	0000 000000	WE 4014 14 4 4014 0 0 0 4 4 4	1.38645 [SYS 06130	
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	0.04 Hours
Factors 0.08 h	0.3612 May 2000 Earned Va	lue Factor	1 000 15 10 10 00 10	2014 000440 T
754 OVEDTIME DAGE & DDE	OCCO DI LIMPEDO AND DIDEFITTEDO	VE4011 1 1 1/0': 0 0: 1 1	1.38645 [SYS 06130	
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS		Linear	0.02 Hours
Factors 0.03 h	0.3612 May 2000 Earned Va	lue Factor	4 00045 1000 0040	001.4.000.440. T
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	1.38645 [SYS 06130 Linear	0.02 Hours
			Linear	0.02 Hours
Factors 0.03 h	0.3612 May 2000 Earned Va	lue Factor	1 2004E ISVS 00420	001.4.2004.40 Torract
754 OVEDTIME DAGE & DDE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	1.38645 [SYS 06130 Linear	0.09 Hours
751 OVERTIME BASE & PRE.			Linear	0.09IHours
Factors 0.17 h	0.3612 May 2000 Earned Va	lue Factor	4 00045 1000 0040	001.4.000.440. T
751 OVERTIME BASE & PRE.	COOL STRUCTURAL AND METAL MC	DRKE KE10H Indust/Site Srvs Steelworkers	1.38645 ISYS 06130	0.04 Hours
	0.3612 May 2000 Earned Va		Linear	U.U4IHOUIS
Factors 0.07 h	0.3012 IVIAY 2000 Earned Va	iue radioi	1 200/E TOVO 00420	001 4 206440 Torest
A5C SUPPLIES	0000 NONE	C210S Facilities Momt & Maintenance	1.38645 [SYS 06130 Linear	01 1.386448 - Tardet 64.97 Dollars
	1.015 FY00 Escalation	0.3612 May 2000 Earned Value Factor	Linear	04.9/1D0llars
Factors 127.81 d	1.015 FTOU ESCAIATION	0.3012 IVIAY 2000 Earned Value Factor	1 000 15 10 10 00 10	

Line Item 1a - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 44 corrective/routine maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98 Item Desc - Fiscal Year Corrective Maintenance Breakdown of Data:

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1.38645 [SYS 061300] 1.386448 - Target

1EFB15 **Rocky Flats Closure Project** 1EFB0515 **Baseline Cost and Basis of Estimate** Proiect Baseline Devl WBS Filter 1EFB Activity Filter

Starts In FY *

Item - Corrective maintenance Units - Work Packages

Unit Cost - \$832.64 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99 Basis for adjustment - None.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 32.31% (includes Linemen)

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

WBS No:

Activity ID:

S Cost Element	Skill	Department	Curve	Ouantity Units
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	32.72 Hours
Factors 65.33 h	0.3612 May 2000 Earned Value Fa	ctor		
			1.38645 [SYS 06130	
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	35.44 Hours
Factors 70.77 h	0.3612 May 2000 Earned Value Fa	ctor		
			1.38645 [SYS 06130	
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	21.81 Hours
Factors 43.55 h	0.3612 May 2000 Earned Value Fa	ctor		
OTD 41011T TIME D 405	0000 5150501010	1/51011 1 1/01: 0 0: 1 1	1.38645 [SYS 06130	
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	52.70 Hours
Factors 105.24 h	0.3612 May 2000 Earned Value Fa	ctor	4 00045 1000 00400	01.4.000.440 T
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	1.38645 [SYS 06130 Linear	47.25 Hours
•	0.3612 May 2000 Earned Value Fa	· · · · · · · · · · · · · · · · · · ·	Linear	47.25 Hours
Factors 94.36 h	0.3012 Iviay 2000 Earried Value Fa	Citi	1.38645 [SYS 06130	01 1 396449 Target
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	45.13 Hours
Factors 90.12 h	0.3612 May 2000 Earned Value Fa		Lilleal	45.15[10013
1 4010/3 30.12 11	0.3012 May 2000 Earrica Value 1 a	Cloi	1.38645 [SYS 06130	01 1 386448 - Target
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	10.91 Hours
Factors 21.78 h	0.3612 May 2000 Earned Value Fa			
			1.38645 [SYS 06130	01 1.386448 - Target
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear	3.64 Hours
Factors 7.26 h	0.3612 May 2000 Earned Value Fa	ctor		
			1.38645 [SYS 06130	01 1.386448 - Target
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear	18.17 Hours
Factors 36.29 h	0.3612 May 2000 Earned Value Fa	ctor		
			1.38645 [SYS 06130	
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear	21.81 Hours
Factors 43.55 h	0.3612 May 2000 Earned Value Fa	ctor		
			1.38645 [SYS 06130	
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	21.81 Hours
Factors 43.55 h	0.3612 May 2000 Earned Value Fa	ctor		
	T I	T.,	1.38645 [SYS 06130	
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	37.26 Hours
Factors 74.4 h	0.3612 May 2000 Earned Value Fa	ctor	4 2004E TOVO 20422	01.4.200440 Torget
		· · · · · · · · · · · · · · · · · · ·	1.38645 [SYS 06130	UI 1.300446 - Taluet

 WBS No:
 1EFB15

 Activity ID:
 1EFB0515

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filte

Baseline Devl 1EFB

	baseline Co	est and Basis of Estimate Activity File	ter * Starts In FY *
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS		Linear 14.54 Hours
Factors 29.04 h	0.3612 May 2000 Earned Valu	ue Factor	
			1.38645 [SYS 061300] 1.386448 - Target
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS		Linear 11.81 Hours
Factors 23.58 h	0.3612 May 2000 Earned Valu	ue Factor	
			1.38645 [SYS 061300] 1.386448 - Target
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS		Linear 75.14 Hours
Factors 150.04 h	0.3612 May 2000 Earned Valu	ue Factor	4 000 45 - FOVO 0040001 4 000 440 - T
750 STRAIGHT TIME BASE	COOC CERLICIURAL AND METAL MO	RKE KE10H Indust/Site Srvs Steelworkers	1.38645 [SYS 061300] 1.386448 - Target Linear 32.11 Hours
Factors 64.12 h	0.3612 May 2000 Earned Valu		Linear 32.11Hours
<i>raciors</i> 04.12 11	0.3012 IVIAV 2000 Earried Valu	ue racioi	1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 1.09lHours
Factors 2.18 h	0.3612 May 2000 Earned Valu		Lineal
2.10	0.0012 Way 2000 Earnou Valo	30 T GOIOT	1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 1.64 Hours
Factors 3.27 h	0.3612 May 2000 Earned Valu		
			1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 1.77 Hours
Factors 3.54 h	0.3612 May 2000 Earned Valu	ue Factor	
			1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 0.55 Hours
Factors 1.09 h	0.3612 May 2000 Earned Valu	ue Factor	
			1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 2.36 Hours
Factors 4.72 h	0.3612 May 2000 Earned Valu	ue Factor	4 000 45 - FOVO 0040001 4 000 440 - T
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	1.38645 [SYS 061300] 1.386448 - Target Linear 2.26 Hours
Factors 4.51 h	0.3612 May 2000 Earned Valu		Linear 2.26 Hours
ruciors 4.31 II	0.3012 May 2000 Lamed Valu	de i actor	1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 2.63 Hours
Factors 5.26 h	0.3612 May 2000 Earned Valu		
1 401075 0120 11	0.00 .2		1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (inc)	Exp KE10H Indust/Site Srvs Steelworkers	Linear 0.18 Hours
Factors 0.36 h	0.3612 May 2000 Earned Valu		
			1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl	Exp KE10H Indust/Site Srvs Steelworkers	Linear 0.91 Hours
Factors 1.81 h	0.3612 May 2000 Earned Valu	ue Factor	
			1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.		Exp KE10H Indust/Site Srvs Steelworkers	Linear 1.09 Hours
Factors 2.18 h	0.3612 May 2000 Earned Valu	ue Factor	
754 OVEDTIME 2.05 0.255	OOTO DAINTEES		1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear 1.86lHours
Factors 3.72 h	0.3612 May 2000 Earned Valu	ue Factor	4 2004E [CVC 064200] 4 200440 T
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	1.38645 [SYS 061300] 1.386448 - Target Linear 1.09 Hours
Factors 2.18 h	0.3612 May 2000 Earned Valu		Lineal 1.09iHours
<i>raciois</i> 2.10 II	0.3012 IVIAY 2000 Earned Valu	ue i acioi	1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear 3.76 Hours
Factors 7.5 h	0.3612 May 2000 Earned Valu		, Emicai i o.7 oli louis
	5.55.2 May 2000 Earlied Vale		1.38645 [SYS 061300] 1.386448 - Target

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Baseline Devl WBS Filter 1EFB

	Baseline	Cost and Basis of Estimate Activity Fil	ter * Si	tarts In FY *
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTE	RS KE10H Indust/Site Srvs Steelworkers	Linear	0.73 Hours
Factors 1.45 h	0.3612 May 2000 Earned	Value Factor		
			1.38645 [SYS 061300] 1.3	86448 - Target
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTE	RS KE10H Indust/Site Srvs Steelworkers	Linear	0.59 Hours
Factors 1.18 h	0.3612 May 2000 Earned	Value Factor		
			1.38645 [SYS 061300] 1.3	86448 - Target
751 OVERTIME BASE & PRE.	C090 STRUCTURAL AND METAL \	WORKE KE10H Indust/Site Srvs Steelworkers	Linear	1.61 Hours
Factors 3.21 h	0.3612 May 2000 Earned	Value Factor		
			1.38645 [SYS 061300] 1.3	86448 - Target
A5C SUPPLIES	0000 NONE	C210S Facilities Momt & Maintenance	Linear	2.911.76 Dollars
Factors 1.015 FY00 Escalation	5728.46 d	0.3612 May 2000 Earned Value Factor	or	

Line Item 1b - Corrective maintenance

1.38645 [SYS 061300] 1.386448 - Target

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 2 corrective/routine maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$40007.5 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 65% of the FY 99 budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficency return.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 32.31% (includes Linemen)

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

S Cost Element	Skill	Department	Curve	Ouantity Units
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	57.63 Hours
Factors 115.08 h	0.3612 May 2000 Earned	Value Factor		
			1.38645 [SYS 06130	001 1.386448 - Target
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	54.43 Hours
Factors 108.69 h	0.3612 May 2000 Earned	Value Factor		
			1.38645 [SYS 06130	001 1.386448 - Target
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	47.63 Hours
Factors 95.12 h	0.3612 May 2000 Earned	Value Factor		
			1.38645 [SYS 06130	001 1.386448 - Target

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 WBS No:
 1EFB15

 Activity ID:
 1EFB0515

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Baseline Devl
WBS Filter 1EFB
Activity Filter *

	Baseline Co	OST AND BASIS OF ESTIMATE Activity File	ter * Starts In FY *
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 53.45 Hours
Factors 106.74 h	0.3612 May 2000 Earned Val		
			1.38645 [SYS 061300] 1.386448 - Target
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 37.49 Hours
Factors 74.86 h	0.3612 May 2000 Earned Val	ue Factor	
			1.38645 [SYS 061300] 1.386448 - Target
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 25.59 Hours
Factors 51.1 h	0.3612 May 2000 Earned Val	ue Factor	1,38645 [SYS 061300] 1,386448 - Target
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 23.82 Hours
Factors 47.56 h	0.3612 May 2000 Earned Val		Lineal 25.02li louis
1 40.00	0.3012 May 2000 Earrica Van	do i doloi	1.38645 [SYS 061300] 1.386448 - Target
750 STRAIGHT TIME BASE	CO40 MAINTENANCE MACHINIST (inc	ELEXID KE10H Indust/Site Srvs Steelworkers	Linear 39.70lHours
Factors 79.27 h	0.3612 May 2000 Earned Val		Lineal 33.7011 Todis
10.27	0.5512 May 2505 Earned Val	40 1 40.01	1.38645 [SYS 061300] 1.386448 - Target
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (inc	ELEXID KE10H Indust/Site Srvs Steelworkers	Linear 7.94 Hours
Factors 15.85 h	0.3612 May 2000 Earned Val		
10.00	oloo 12 may 2000 2amod van	40 1 40.01	1.38645 [SYS 061300] 1.386448 - Target
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (inc	ELEXID KE10H Indust/Site Srvs Steelworkers	Linear 47.63 Hours
Factors 95.12 h	0.3612 May 2000 Earned Val		
3	oloo 12 may 2000 2amod van	40 1 40.01	1.38645 [SYS 061300] 1.386448 - Target
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear 81.37 Hours
Factors 162.49 h	0.3612 May 2000 Earned Val		
	,		1.38645 [SYS 061300] 1.386448 - Target
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear 47.63 Hours
Factors 95.12 h	0.3612 May 2000 Earned Val		
	.,		1.38645 [SYS 061300] 1.386448 - Target
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear 31.76 Hours
Factors 63.42 h	0.3612 May 2000 Earned Val		
	.,		1.38645 [SYS 061300] 1.386448 - Target
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear 164.11 Hours
Factors 327.7 h	0.3612 May 2000 Earned Val		
			1.38645 [SYS 061300] 1.386448 - Target
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear 25.80 Hours
Factors 51.51 h	0.3612 May 2000 Earned Val		
			1.38645 [SYS 061300] 1.386448 - Target
750 STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL WO	RKE KE10H Indust/Site Srvs Steelworkers	Linear 70.13 Hours
Factors 140.04 h	0.3612 May 2000 Earned Val		
			1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 2.38 Hours
Factors 4.76 h	0.3612 May 2000 Earned Val		
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	1.38645
Factors 7.73 h	0.3612 May 2000 Earned Val		
			1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 3.57 Hours
Factors 7.13 h	0.3612 May 2000 Earned Val		
	,		1.38645 [SYS 061300] 1.386448 - Target
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 5.16 Hours
Factors 10.31 h	0.3612 May 2000 Earned Val		
	The state of the s		1.38645 [SYS 061300] 1.386448 - Target
-			12.22.221

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filter

Baseline Devl 1EFB

121 20010	Baseline Cost	t and Basis of Estimate Activity	Filter *	Starts In FY *
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	5.75 Hours
Factors 11.49 h	0.3612 May 2000 Earned Value	Factor		
			1.38645 [SYS 0613	
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	1.19 Hours
Factors 2.38 h	0.3612 May 2000 Earned Value	Factor		
754 OVEDTIME DAGE & DDE	LOGO ELECTRICIANO	1/54011 1 1 1/0% 0 00 1 1	1.38645 [SYS 0613	
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS 0.3612 May 2000 Earned Value	KE10H Indust/Site Srvs Steelworkers	Linear	4.93 Hours
Factors 9.84 h	0.3612 May 2000 Earned Value	Factor	1.38645 [SYS 0613	001 1 386448 - Target
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl E	Exp KD10H 776 Complex Steelworkers	Linear	1.98 Hours
Factors 3.96 h	0.3612 May 2000 Earned Value			
			1.38645 [SYS 0613	001 1.386448 - Target
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl E	KE10H Indust/Site Srvs Steelworkers	Linear	2.38 Hours
Factors 4.76 h	0.3612 May 2000 Earned Value	Factor		
			1.38645 [SYS 0613	
751 OVERTIME BASE & PRE.		KE10H Indust/Site Srvs Steelworkers	Linear	0.40 Hours
Factors 0.79 h	0.3612 May 2000 Earned Value	Factor		
	Local DANIERO	1/5/01/1/1/20/- 0 0/- 1/-	1.38645 [SYS 0613	
751 OVERTIME BASE & PRE.	C070 PAINTERS 0.3612 May 2000 Earned Value	KE10H Indust/Site Srvs Steelworkers	Linear	4.07 Hours
Factors 8.12 h	0.3612 May 2000 Earned Value	Factor	1.38645 [SYS 0613	001 1 206449 Torgot
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	1.38645 1515 0613	2.38 Hours
Factors 4.76 h	0.3612 May 2000 Earned Value		Linear	2.30 110013
1.10	0.0012 May 2000 Earnod Value	1 40101	1.38645 [SYS 0613	001 1.386448 - Target
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	1.29 Hours
Factors 2.58 h	0.3612 May 2000 Earned Value	Factor		
			1.38645 [SYS 0613	00] 1.386448 - Target
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	8.20 Hours
Factors 16.38 h	0.3612 May 2000 Earned Value	Factor		
			1.38645 [SYS 0613	
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	1.59 Hours
Factors 3.17 h	0.3612 May 2000 Earned Value	Factor	1 000 45 10) 12 22 12	2014 202442 T
754 OVERTIME DAGE & DRE	COOO STRUCTURAL AND METAL MORE	KE KE10H Indust/Site Srvs Steelworkers	1.38645 [SYS 0613	001 1.386448 - Target 3.51 Hours
751 OVERTIME BASE & PRE.	0.36128 May 2000 Earned Value		Linear	3.51IHOUIS
actors I II	U.SU120 IVIAY 2000 Earned Value	i autoi	1.38645 [SYS 0613	001 1 386448 - Target
A5C SUPPLIES	0000 NONE	C210S Facilities Momt & Maintenance	Linear	6.346.69 Dollars
Factors 1.015 FY00 Escalation	12486.2 d	0.3612 May 2000 Earned Value Fa		U.O-TO.OOIDOIIAIS
1.010 1100 Localation	12 100.2 d	0.0012 May 2000 Earlied Value I a		

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 1 preventative maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Data Source - MMS and P&I Reporting System SVAR for FY98 Item Desc - Fiscal Year Preventive Maintenance Breakdown of Data:

1.38645 [SYS 061300] 1.386448 - Target

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Baseline Devl WBS Filter 1EFB Activity Filter *

Starts In FY

1.38645 [SYS 061300] 1.386448 - Target

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$133 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99

Basis for adjustment - None.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50% Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

3	Cost Element		Skill	Department	Curve	Ouantity Units
75	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	0.97 Hours
Facto	<i>rs</i> 1.94 h		0.3612 May 2000 Earned Value Fac	ctor		
_					1.38645 [SYS 06130	01 1.386448 - Target
75	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear	0.73 Hours
Facto	<i>rs</i> 1.46 h		0.3612 May 2000 Earned Value Fac	ctor		
_					1.38645 [SYS 06130	01 1.386448 - Target
75	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	0.11 Hours
Facto	<i>rs</i> 0.22 h		0.3612 May 2000 Earned Value Fac	ctor		
					1.38645 [SYS 06130	01 1.386448 - Target
75	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	0.05 Hours
Facto	<i>rs</i> 0.1 h		0.3612 May 2000 Earned Value Fac	ctor		
					1.38645 [SYS 06130	01 1.386448 - Target
75	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear	0.04 Hours
Facto	<i>rs</i> 0.07 h		0.3612 May 2000 Earned Value Fac	ctor		
					1.38645 [SYS 06130	01 1.386448 - Target
75	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	0.01 Hours
Facto	<i>rs</i> 0.01 h		0.3612 May 2000 Earned Value Fac	ctor		
	T		1		1.38645 [SYS 06130	01 1.386448 - Target
A5	SUPPLIES	0000	NONE	C210S Facilities Momt & Maintenance	Linear	7.22 Dollars
Facto	<i>rs</i> 14.2 d		1.015 FY00 Escalation	0.3612 May 2000 Earned Value Factor		

Line Item 3a - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backleg, and projected work load. These items were the basis from which RFCSS proposed, negociated, and was awarded the Site maintenance contract VM9000009. The proposal value was then modeled to each alustor based on the number of maintenance activities as a proposal value was then modeled to each alustor based on the number of maintenance activities are modeled with that aluston

maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

Approximately 1 preventative maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$5957 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99 Basis for adjustment - None.

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filter

Baseline Devl 1EFB

Starts In FY

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50% Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

s		Cost Element		Skill		Department	Curve	Ouantity	Units
L	750	STRAIGHT TIME BASE	C020 E	LECTRICIANS	KE10H Ind	dust/Site Srvs Steelworkers	Linear	43.62	Hours
- 1	Factors	87.11 h		0.3612 May 2000 Earned Value Fac	ctor				
_							1.38645 [SYS 061300)] 1.386448 - Ta	ıraet
L	750	STRAIGHT TIME BASE	C040 N	MAINTENANCE MACHINIST (incl Exp	KE10H Ind	dust/Site Srvs Steelworkers	Linear	32.72	Hours
- 1	Factors	65.33 h		0.3612 May 2000 Earned Value Fac	ctor				
-							1.38645 [SYS 061300	1 1 386448 - Ta	ıraet
L	750	STRAIGHT TIME BASE	C080 P	PLUMBERS AND PIPEFITTERS	KE10H Ind	dust/Site Srvs Steelworkers	Linear	4.99	Hours
1	Factors	9.97 h		0.3612 May 2000 Earned Value Fac	ctor				
_		T.	, ,				1.38645 [SYS 061300	1.386448 - Ta	raet
L	751	OVERTIME BASE & PRE.	C020 E	LECTRICIANS	KE10H Ind	dust/Site Srvs Steelworkers	Linear	2.18	Hours
1	Factors	4.36 h		0.3612 May 2000 Earned Value Fac	ctor				
г		Т	T				1.38645 [SYS 061300	1.386448 - Ta	raet
L	751	OVERTIME BASE & PRE.	C040 N	MAINTENANCE MACHINIST (incl Exp	KE10H Ind	dust/Site Srvs Steelworkers	Linear	1.64	Hours
1	Factors	3.27 h		0.3612 May 2000 Earned Value Fac	ctor				
г		T					1.38645 [SYS 061300)] 1.386448 - Ta	raet
L	751	OVERTIME BASE & PRE.	C080 P	PLUMBERS AND PIPEFITTERS	KE10H Ind	dust/Site Srvs Steelworkers	Linear	0.25	Hours
1	Factors	0.5 h		0.3612 May 2000 Earned Value Fac	ctor				
г		T					1.38645 [SYS 061300)] 1.386448 - Ta	raet
L	A5C	SUPPLIES	0000 N	IONE	C210S Fa	cilities Mamt & Maintenance	Linear	323.53	Dollars
1	Factors	1.015 FY00 Escalation		636.5 d	0.3	3612 May 2000 Earned Value Factor			

1.38645 [SYS 061300] 1.386448 - Tarqet

Line Item 3b - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 15 preventative maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$867.27 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 65% of the FY 99 budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficency return.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50%

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filter

Baseline Devl 1EFB

Starts In FY

Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es		Cost Element			Skill		Department	Curve	Quantity	Units
	750	STRAIGHT TIME BASE	C020	ELECTRIC	CIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	95.27	Hours
	Factors	190.25 h		0.3612	May 2000 Earned Value Fac	ctor				
								1.38645 [SYS 06130	01 1.386448 - T	arget
Ĺ	750	STRAIGHT TIME BASE	C040	MAINTEN	ANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	71.46	Hours
	Factors	142.69 h		0.3612	May 2000 Earned Value Fac	ctor				
r								1.38645 [SYS 06130	01 1.386448 - T	arget
Ĺ	750	STRAIGHT TIME BASE	C080	PLUMBER	S AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	10.90	Hours
	Factors	21.77 h		0.3612	May 2000 Earned Value Fac	ctor				
			ı					1.38645 [SYS 06130	01 1.386448 - T	arget
Ĺ	751	OVERTIME BASE & PRE.	C020	ELECTRIC	CIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.76	Hours
	Factors	9.51 h		0.3612	May 2000 Earned Value Fac	ctor				
г				1			1	1.38645 [SYS 06130	01 1.386448 - T	arget
ļ	751	OVERTIME BASE & PRE.	C040	MAINTEN	ANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	3.57	Hours
	Factors	7.13 h		0.3612	May 2000 Earned Value Fac	ctor				
г				1			1	1.38645 [SYS 06130	01 1.386448 - T	arget
ļ	751	OVERTIME BASE & PRE.	C080	PLUMBER	S AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.55	Hours
	Factors	1.09 h		0.3612	May 2000 Earned Value Fac	ctor				
г				1			1	1.38645 [SYS 06130	01 1.386448 - T	arget
L	A5C	SUPPLIES	0000	NONE		C210S	Facilities Momt & Maintenance	Linear	706.63	Dollars
	Factors	1390.19 d		1.015	FY00 Escalation		0.3612 May 2000 Earned Value Factor			

1.38645 [SYS 061300] 1.386448 - Target

Activity ID: 1EFB0520 Description:

Description: Site Services Cluster Landlord Funtions, FY01

Cost Risk 2 Schedule Risk

Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
1	Corrective maintenance	1.00	each	HC	20	20	433	115	0	548	206	755
1a	Corrective maintenance	1.00	each	HC	899	899	19.375	5.171	0	24.546	9.242	33.788
1b	Corrective maintenance	0.65	each	HC	1.964	1.277	27.533	7.341	0	34.874	13.133	48.008
3	Preventive maintenance	1.00	each	HC	3	3	74	13	0	87	35	122
3a	Preventive maintenance	1.00	each	HC	152	152	3.324	575	0	3.899	1.586	5.484
3b	Preventive maintenance	0.65	each	HC	331	215	4.718	816	0	5.534	2.251	7.785
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	5.075	5.075	0	5.075
	To	tal for Activi	tv 1EFB0520):		2.566	55.458	14.031	5.075	74.564	26.453	101.017

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

Approximately 1 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$818 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99

Basis for adjustment - None.

The percentage of maintenance effort (labor Type) is as follows:

WBS No: 1EFB15 1EFB0520 Activity ID:

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Baseline Devl Proiect WBS Filter 1EFB Activity Filter

Starts In FY *

Carpenter 15.38% Electrician 30.77% (includes Linemen) Maint. Mech 13.85%

10.77% Painter Pipefitter 23.08% Metal Worker 4.62%

Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

S Cost Element	Skill	Department	Curve	Ouantity Units
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	1.30 Hours
Factors 1.46 h				
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers		4001 .88934200 - Svstem 1.41 Hours
750 STRAIGHT TIME BASE Factors 1.58 h	COTO CARPENTERS	KETUH Indust/Site Srvs Steelworkers	Linear	1.41[Hours
ructors 1.50 II			0.88934 ISYS.061	4001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	0.86 Hours
Factors 0.97 h			•	,
	1			4001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	1.88 Hours
Factors 2.11 h			0.00004 [0)/0.004	1001 0000 1000 0 1
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	0.88934 ISYS 061 Linear	4001 .88934200 - Svstem 1.79 Hours
Factors 2.01 h	1 CO20 ILLECTRICIANS	RETOTT IIIIdust/Site Sivs Steetworkers	Lilleal	1.731110015
Tuestoria Z.OT			0.88934 [SYS 061	4001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	2.09 Hours
Factors 2.35 h				
	1 1			4001 .88934200 - System
750 STRAIGHT TIME BASE	I C040 IMAINTENANCE MACHINIST (inc	EXD KE10H Indust/Site Srvs Steelworkers	Linear	0.14 Hours
Factors 0.16 h			0.00034 1575.064	4001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (inc	Exp KE10H Indust/Site Srvs Steelworkers	0.00934 1313 001 Linear	0.86 Hours
Factors 0.97 h				V.001110410
			0.88934 [SYS 061	4001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (inc	Exp KE10H Indust/Site Srvs Steelworkers	Linear	0.72 Hours
Factors 0.81 h				
TEO OTRAIGUE TIME DAGE	C070 PAINTERS	VE4011 1 1 1/0% 0 00 1 1		4001 .88934200 - Svstem 0.86 Hours
750 STRAIGHT TIME BASE Factors 0.97 h	I CO/O IPAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	0.86IHours
<i>Paciors</i> 0.97 II			0.88934 ISYS.061	4001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	1.48 Hours
Factors 1.66 h				
				4001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	2.98 Hours
Factors 3.35 h			0.00004 10000.004	4001 0000 4000 Outleas
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 ISYS 061	4001 .88934200 - Svstem 0.58 Hours
Factors 0.65 h	1 COOU IF LOWIDLING AND FIFEFITTERS	TE TOTT IIII UUSI/SILE SIVS SIEEIWOIKEIS	LIIIGAI	v.soji iodis
			0.88934 [SYS 061	4001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	0.47 Hours
Factors 0.53 h				
·	· · · · · · · · · · · · · · · · · · ·		0.88934 [SYS 061	4001 .88934200 - Svstem

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Ba
WBS Filter 1E
Activity Filter *

Baseline Devl 1EFB

1EFB0520	Baseline Cost a	nd Basis of Estimate	WBS Filter Activity Filter	1EFB *	Starts In FY *
750 STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL WORKE	KE10H Indust/Site Srvs Steelwork		Linear	1.27 Hours
Factors 1.43 h					
750 STRAIGHT TIME BASE	R070 WASTE TREATMENT OPERATOR A	KE10H Indust/Site Says Steelwork	ore .	0.88934 ISYS 0614 Linear	001 .88934200 - Svstem 0.44 Hours
Factors 0.49 h	I KOTO IWASTE TREATMENT OF ENATOR A	TAL TOTT IIII III III III III III III III I	CIS	Lilleal	0.44II IOUIS
					001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelwork	ers	Linear	0.07 Hours
Factors 0.08 h				0.88034 1676 0814	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelwork	ers	Linear	0.06 Hours
Factors 0.07 h					
		T			001 .88934200 - Svstem
751 OVERTIME BASE & PRE. Factors 0.05 h	C010 CARPENTERS	KE10H Indust/Site Srvs Steelwork	ers	Linear	0.04 Hours
raciois 0.05 II				0.88934 [SYS 0614	001 .88934200 - System
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwork	ers	Linear	0.09 Hours
Factors 0.1 h					
754 0//507/M5 0405 4 005	OSSS ELECTRICIANO				001 .88934200 - Svstem
751 OVERTIME BASE & PRE. Factors 0.12 h	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwork	ers	Linear	0.11 Hours
1 441075 0.12 11				0.88934 [SYS 0614	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwork	ers	Linear	0.10 Hours
Factors 0.11 h					
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	VE10H Indust/Site Save Steelwork	oro	0.88934 SYS 0614 Linear	00] .88934200 - System 0.04 Hours
Factors 0.05 h	CO40 IMAINTENANCE IMACHINIST (INCLEX)	RETUIT IIIIdust/Site Sivs Steelwork	CIS	Lilleai	0.04 110015
				0.88934 [SYS 0614	00] .88934200 - System
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelwork	ers	Linear	0.01 Hours
Factors 0.01 h				0.00004 [0000.0044	001 00004000 0
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srys Steelwork	ers	U.86934 1515 0614	00] .88934200 - System 0.04 Hours
Factors 0.04 h		THE FOIL HINGS ON STATE STORY	010	Linoui	0.0 111 10010
					001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelwork	ers	Linear	0.04 Hours
Factors 0.05 h				0.88034 [SVS 0614	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelwork	ers	Linear	0.07 Hours
Factors 0.08 h					
		T			001 .88934200 - Svstem
751 OVERTIME BASE & PRE. Factors 0.03 h	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwork	ers	Linear	0.03 Hours
raciors 0.03 II				0.88934 [SYS 0614	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwork	ers	Linear	0.03 Hours
Factors 0.03 h					
754 OVEDTIME BACE & DDE	COOO DI LIMPERO AMB DIRECTTESO	VE4011 Indust/Cit- C Ct- 1			001 .88934200 - Svstem
751 OVERTIME BASE & PRE. Factors 0.17 h	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwork	ers	Linear	0.15 Hours
V.17 11				0.88934 [SYS 0614	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C090 STRUCTURAL AND METAL WORKE	KE10H Indust/Site Srvs Steelwork	ers	Linear	0.06 Hours
Factors 0.07 h					001 0000 105 - 0
_				0.88934 [SYS 0614	00] .88934200 - System

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Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Baseline Devl Proiect WBS Filter 1EFB

0.88934 [SYS 061400] .88934200 - System

					Activity Filter	*	Starts In FY *
7	OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	0.02 Hours
Faci	ors 0.02 h					0.00004 1000000	01.00004000
	CO CLIPPLIES	0000	NONE	00400	Carillaina Marrat O Maintanana		01 .88934200 - Svstem
A!	C SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	L 15.3/ID0llars

Factors Line Item 1a - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 44 corrective/routine maintenance work actions are expected.

1.015

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

127.81 d

Unit Cost - \$832.64 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99 Basis for adjustment - None.

-- FY00 Escalation --

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 30.77% (includes Linemen)

Maint. Mech 13.85% Painter 10.77% 23.08% Pipefitter Metal Worker 4.62%

Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

s	Cost Element		Skill	Department	Curve	Ouantity	Units
L	750 STRAIGHT TIME BASE	C010	CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	38.73	Hours
I	Factors 43.55 h						
_					0.88934 [SYS 061400	01 .88934200 - \$	System
L	750 STRAIGHT TIME BASE	C010	CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	58.10	Hours
I	Factors 65.33 h						
_		1			0.88934 [SYS 061400	01 .88934200 - \$	System
L	750 STRAIGHT TIME BASE	C010	CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	62.94	Hours
I	Factors 70.77 h						
_		1	T-		0.88934 [SYS 061400	01 .88934200 - Ş	System
L	750 STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	80.15	Hours
I	Factors 90.12 h						
_			T		0.88934 [SYS 061400	01 .88934200 - \$	System
L	750 STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	83.92	Hours
I	Factors 94.36 h						
_		1	T		0.88934 [SYS 061400	01 .88934200 - \$	System
L	750 STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	93.59	Hours
I	Factors 105.24 h						
		-			0.88934 [SYS 061400	01 .88934200 - \$	System

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Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filte

Baseline Devl 1EFB

	Baseline Cost ar	id Basis of Estimate	Activity Filter *	Starts In FY *
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworke		Linear 32.27 Hours
Factors 36.29 h				
			0.8893	34 [SYS 061400] .88934200 - Svstem
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworke	ers L	Linear 38.73 Hours
Factors 43.55 h				
				34 [SYS 061400] .88934200 - Svstem
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworke	ers L	Linear 6.46 Hours
Factors 7.26 h				
750 STRAIGHT TIME BASE	C070 PAINTERS	KE4011 In durat/Cita Con a Ota alturation		34 [SYS 061400] .88934200 - System Linear 66.17 Hours
	I CU/U IPAINTERS	KE10H Indust/Site Srvs Steelworke	ers L	Linear 66.17lHours
Factors 74.4 h			0.8803	34 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworke		Linear 38.73 Hours
Factors 43.55 h	1 OO7O II AIIYI EIKO	TILL TOTA IIII GGGVORG OTVS OCCUVOTRO		30.7 011 10413
1 40.00			0.8893	34 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworke		Linear 25.83 Hours
Factors 29.04 h				
			0.8893	34 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworke	ers L	Linear 20.97 Hours
Factors 23.58 h				
			0.8893	34 [SYS 061400] .88934200 - Svstem
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworke	ers L	Linear 133.44 Hours
Factors 150.04 h				
			0.8893	34 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL WORKE	KE10H Indust/Site Srvs Steelworke	ers L	Linear 57.02 Hours
Factors 64.12 h			0.0000	24 [CVC 064400] 00024200 Cycle m
750 STRAIGHT TIME BASE	R070 WASTE TREATMENT OPERATOR A	KE10H Indust/Site Says Steelworks	0.8693	34 [SYS 061400] .88934200 - System Linear 19.37 Hours
Factors 21.78 h	RU/U WASIE REALMENT OFERATOR A	KETOH IIIIdust/Site SIVS SteetWorke	15	_iiieai 19.37 Houis
raciois 21.70 II			0.8893	34 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworke		Linear 2.91 Hours
Factors 3.27 h				
			0.8893	34 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworke		Linear 3.15 Hours
Factors 3.54 h				
			0.8893	34 [SYS 061400] .88934200 - Svstem
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworke	ers L	Linear 1.94 Hours
Factors 2.18 h				
				34 ISYS 0614001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworke	ers L	Linear 4.68 Hours
Factors 5.26 h			0.000	14 [0)(0.004400] 00004000 0
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Smin Steeling Ite		34 [SYS 061400] .88934200 - System Linear 4.01 Hours
751 OVERTIME BASE & PRE. Factors 4.51 h	I CUZU IELECTRICIANS	KE10H Indust/Site Srvs Steelworke	115 L	Linear 4.01 Hours
raciors 4.31 II			U 88U3	34 [SYS 0614001.88934200 - System
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworke		Linear 4.20 Hours
Factors 4.72 h	1 SOLO IELEO IMONANO	TE TOTA III IMAGNOTE OF A STEELWOLKE	1 L	
1114 11			0 8893	34 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworke		Linear 1.61 Hours
Factors 1.81 h				
			0.8893	34 [SYS 061400] .88934200 - System

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl 1EFB

		Baseline Cost an	a Basis	or Estimate	Activity Filter *	Si	tarts In FY *
751 OVERTIME I	BASE & PRE. C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Li	inear	1.94 Hours
Factors 2.18	h						
		T			0.88934	ISYS 0614001.88	
	BASE & PRE. C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Li	inear	0.32 Hours
Factors 0.36	h						
		I				ISYS 0614001.88	
		PAINTERS	KD10H	776 Complex Steelworkers	<u>L</u> i	inear	3.31 Hours
Factors 3.72	h				0.0000		2004000 0 4
751 OVERTIME I	DACE 8 DDE	PAINTERS	IZE40LL	La divisting to the china division		SYS 0614001.88	
		IPAINTERS	KETUH	Indust/Site Srvs Steelworkers	L	near	1.94 Hours
Factors 2.18	h				0.00034	I (SYS 0614001 .88	1024200 System
751 OVERTIME I	RASE & PRE CORO	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers		inear	1.29 Hours
	h	IFLOWIDENS AND FIFEI II TENS	KL IUII	IIIdus//Site Sivs SteelWorkers	L	licai	1.231110015
1 4010/5 1.40					0.88934	I SYS 0614001.88	1934200 - System
751 OVERTIME I	BASE & PRE. C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers		inear	1.05 Hours
Factors 1.18	h						
					0.88934	ISYS 0614001.88	934200 - Svstem
751 OVERTIME I	BASE & PRE. C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Li	inear	6.67 Hours
Factors 7.5	h						
					0.88934	ISYS 0614001.88	934200 - Svstem
751 OVERTIME I	BASE & PRE. C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Li	inear	2.85 Hours
Factors 3.21	h						
		1				SYS 0614001.88	
751 OVERTIME I		WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Li	inear	0.97 Hours
Factors 1.09	h						
450 OLIDBUSES	1 2222	NONE	00400	E 777 M		SYS 061400] .88	
A5C SUPPLIES	0000	NONE 5/60 F J ii	C210S	Facilities Mgmt & Maintenance	<u> </u>	inear	5,170.98 Dollars
Factors 5728.46	a	1.015 FY00 Escalation					

Line Item 1b - Corrective maintenance

0.88934 [SYS 061400] .88934200 - System

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

Approximately 2 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$40007.5 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 65% of the FY 99 budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficency return.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 32.31% (includes Linemen)

Maint. Mech 13.85% Painter 10.77%

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WBS No: 1EFB15 1EFB0520 Activity ID:

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Activity Filter

Baseline Devl 1EFB

Starts In FY *

Pipefitter 23.08% Metal Worker 4.62%

_					
D	es	^	120	~~	•

	This es	stimate includes a project pro	ductivi	ty/efficiency factor for comm	itted b	ut as yet undefined cost i	reductions.		
es		Cost Element		Skill		Department	Curve	Quantity	Units
	750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	126.90 Ho	ours
	Factors	142.69 h					0.00004 10000.004	14001 00004000 0	
	750	STRAIGHT TIME BASE	C010	CARPENTERS	KF10H	Indust/Site Srvs Steelworkers	0.88934 ISYS 061 Linear	14001 .88934200 - Svs 84.59 Ho	
	Factors	95.12 h	0010		1121011	THI MANUAL OF THE CONTROLL OF THE CONTROLL OF THE CONTROL OF THE C	Ellissai	01.001110	2010
								14001 .88934200 - Svs	
		STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	137.47 Ho	ours
	Factors	154.58 h					0.88934 ISVS 061	14001 .88934200 - Svs	stem
	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	42.30 Ho	
	Factors	47.56 h							
	T					1		14001 .88934200 - Svs	
	750 Factors	STRAIGHT TIME BASE 206.1 h	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	183.29Hd	ours
	raciors	200.1 11					0.88934 [SYS 061	14001 .88934200 - Svs	stem
	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	175.06 Ho	
	Factors	196.84 h							
	750	OTDAIGUIT TIME DAGE	0000	ELECTRICIANS	KEAOLI	La divat/Cita Cara Ctanhundian		14001 .88934200 - Svs	
	750 Factors	STRAIGHT TIME BASE 229.86 h	C020	IELEC I RICIANS	KETUH	Indust/Site Srvs Steelworkers	Linear	204.42 Ho	ours
	Tuciors	223.00 11					0.88934 [SYS 061	14001 .88934200 - Svs	stem
	750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	70.50 Ho	
	Factors	79.27 h							
	750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Save Steelworkers	0.88934 ISYS 061 Linear	14001 .88934200 - Svs 14.10 Ho	
	Factors	15.85 h	0040	IIIVAINI EIVANCE IVIACI IINIST (IIICI EXD.)	IXE IVII	IIIIddsVolte SIVS SteelWorkers	Lilleai	14.101110	Juis
							0.88934 ISYS 061	14001 .88934200 - Svs	
		STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	84.59 Ho	ours
	Factors	95.12 h					0.8024 1575.064	14001 00024200 5	atom
	750	STRAIGHT TIME BASE	C070	PAINTERS	KF10H	Indust/Site Srvs Steelworkers	0.88934 ISTS 06	14001 .88934200 - Svs 84.59 Ho	
	Factors	95.12 h							
						1		14001 .88934200 - Svs	
		STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	144.51 Ho	ours
	Factors	162.49 h					0.88934 ISYS 061	14001_88934200 - Svs	stem
	750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	56.40 Ho	
	Factors	63.42 h							
	750	OTDAIGUIT TIME DAGE	0000	PLUMBERS AND PIPEFITTERS	KEAOLI	Indust/Site Srvs Steelworkers		14001 .88934200 - Svs	
	750 Factors	STRAIGHT TIME BASE 51.51 h	C080	IPLUMBERS AND PIPEFITTERS	KETUH	indust/Site Srvs Steelworkers	Linear	45.81 Ho	ours
	. 40.075						0.88934 ISYS 061	14001 .88934200 - Svs	stem
	750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	291.44 Ho	
	Factors	327.7 h					0.0000 / 10\10	14001 0000 1000 -	
	750	STRAIGHT TIME BASE	COOO	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	0.88934 [SYS 061 Linear	14001 .88934200 - Svs 124.54 Ho	
	Factors	140.04 h	0030	ICTIOCIONAL AND WILLIAL WORKE		IIII GOVOILE OI VO OLEEIWUINEIS	Lilical	124.04100	/uI3
							0.88934 [SYS 061	14001 .88934200 - Svs	stem

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter

Baseline Devl 1EFB

. 2. 20020	Baseline Cos	et and Basis of Estimate	ilter *	Starts In FY *
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srys Steelworkers	Linear	4.23 Hours
Factors 4.76 h			0.88934 ISYS 061400	01 88034300 System
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 ISYS 061400 Linear	6.34 Hours
Factors 7.13 h	TOOTO TOMM ENTERNO	TILETOTT IIII MUSUUMU OTVS OLOGIWOTIOIS	Lilicai	U.OHII IOUIS
754 0)/5071045 0 005 0 005	C010 CARPENTERS	1/54011 1 1 1/0% 0 00 1 1	0.88934 [SYS 061400	01 .88934200 - Svstem 6.87 Hours
751 OVERTIME BASE & PRE. Factors 7.73 h	I C010 ICARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	6.8/IHours
	T		0.88934 [SYS 061400	
751 OVERTIME BASE & PRE. Factors 2.38 h	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	2.12 Hours
raciors 2.30 II			0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	8.75 Hours
Factors 9.84 h			0.88934 [SYS 06140	01 99034200 Systom
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	0.66934 1313 061400 Linear	9.17 Hours
Factors 10.31 h				
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srys Steelworkers	0.88934 [SYS 061400 Linear	01 .88934200 - Svstem 10.22 Hours
Factors 11.49 h	1 CO20 TELECTRICIANS	RETURN IIII IIII IIII IIII IIII IIII IIII I	Linear	10.22IHOUIS
			0.88934 [SYS 061400	
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl	Exp KE10H Indust/Site Srvs Steelworkers	Linear	4.23 Hours
Factors 4.76 h			0.88934 [SYS 061400	01 88934200 - System
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl	Exp KE10H Indust/Site Srvs Steelworkers	Linear	0.70 Hours
Factors 0.79 h			0.00004 [0]/0.00440	21 00004000 0 4
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl.)	Exp KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400 Linear	3.52 Hours
Factors 3.96 h				0.021.104.0
754 OVEDTIME DAGE & DDE	OOTO DANKERO	1/54011 1 1 1/0% 0 00 1 1	0.88934 [SYS 061400	
751 OVERTIME BASE & PRE. Factors 4.76 h	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	4.23 Hours
Tuctors III			0.88934 [SYS 061400	
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	7.22 Hours
Factors 8.12 h			0.88934 [SYS 06140	01 88934200 - System
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	14.57 Hours
Factors 16.38 h				
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400 Linear	01 .88934200 - Svstem 2.82 Hours
Factors 3.17 h	1 COOO IFLOMBENS AND FIFEI II I ENS	RETUIT IIIIQUSI/SILE SIVS SILEEIWOIKEIS	LIIICAI	2.021110015
			0.88934 [SYS 061400	
751 OVERTIME BASE & PRE. Factors 2.58 h	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	2.29 Hours
<i>Fuciors</i> 2.30 II			0.88934 [SYS 061400	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C090 STRUCTURAL AND METAL WOR	KE KE10H Indust/Site Srvs Steelworkers	Linear	6.23 Hours
Factors 7 h			0.00004 [CVC 004.404	01 00004000 Cust
A5C SUPPLIES	0000 NONE	C210S Facilities Momt & Maintenance	0.88934 [SYS 061400 Linear	11.294.10 Dollars
Factors 12511.7 d	1.015 FY00 Escalation	The state of the s		
			0.88934 [SYS 061400	0] .88934200 - System

Line Item 3 - Preventive maintenance

BOE Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to

WBS No: 1EFB15 1EFB0520 Activity ID:

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Baseline Devl Proiect

WBS Filter 1EFB Activity Filter

Starts In FY

0.88934 [SYS 061400] .88934200 - System

Units

corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 1 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$133 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99

Basis for adjustment - None.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50% Pipefitter 12 50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	1.73 Hours
Factors 1.94 h				
			0.88934 [SYS 06140	01 .88934200 - Svstem
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (inc	CLEXP KE10H Indust/Site Srvs Steelworkers	Linear	1.30 Hours
Factors 1.46 h				
			0.88934 [SYS 06140	01 .88934200 - Svstem
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	0.20 Hours
Factors 0.22 h				
			0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	0.09 Hours
Factors 0.1 h				
			0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (inc	cl Exp KE10H Indust/Site Srvs Steelworkers	Linear	0.06 Hours
Factors 0.07 h				
			0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	0.01 Hours
Factors 0.01 h				
			0.88934 [SYS 06140	01 .88934200 - Svstem
A5C SUPPLIES	0000 NONE	C210S Facilities Mamt & Maintenance	Linear	12.82 Dollars
Factors 14.2 d	1.015 FY00 Escalation			

Devartmen

Line Item 3a - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS. Approximately 1 preventative maintenance work actions are expected.

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filter

Department

Baseline Devl 1EFB

Curve

Starts In FY

Quantity

Units

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$5957 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99

Basis for adjustment - None.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Cost Element

Maint. Mech 37.50%

Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	77.47 Hours
Factors 87.11 h				
			0.88934 [SYS 06140	0] .88934200 - System
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIS	ST (incl Exp KE10H Indust/Site Srvs Steelworkers	Linear	58.10 Hours
Factors 65.33 h				
			0.88934 [SYS 06140	01 .88934200 - Svstem
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITT	FERS KE10H Indust/Site Srvs Steelworkers	Linear	8.87 Hours
Factors 9.97 h				
			0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	3.88 Hours
Factors 4.36 h				
			0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIS	T (incl Exp KE10H Indust/Site Srvs Steelworkers	Linear	2.91 Hours
Factors 3.27 h				
			0.88934 [SYS 06140	01 .88934200 - Svstem

					0.88934 [SYS 06140	01 .88934200 - Svstem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	0.44 Hours

Factors 0.5 h

A5C SUPPLIES 0000 NONE C210S Facilities Momt & Maintenance Linear 574.56|Dollars

Factors 636.5 d

1.015 -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - System

Line Item 3b - Preventive maintenance BOE Preventive Maintena

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 15 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$867.27 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 65% of the FY 99 budget per FCP 1999-8064

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WBS No: 1EFB15 **Rocky Flats Closure Project** 1EFB0520 Activity ID: **Baseline Cost and Basis of Estimate**

Baseline Devl Proiect WBS Filter 1EFB Activity Filter

Linear

0.88934 [SYS 061400] .88934200 - System

Starts In FY

1.254.90 Dollars

Basis for adjustment - FCP 1999-8064 funding efficency return.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50%

Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

s	Cost Element		Skill		Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	169.20	Hours
1	Factors 190.25 h							
_						0.88934 [SYS 06140	01 .88934200 - \$	Svstem
L	750 STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	126.90	Hours
1	Factors 142.69 h							
						0.88934 [SYS 06140	0] .88934200 - \$	System
	750 STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	19.36	Hours
1	Factors 21.77 h							
						0.88934 [SYS 06140	0] .88934200 - \$	System
	751 OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	8.46	Hours
1	Factors 9.51 h							
_			T			0.88934 [SYS 06140	01 .88934200 - \$	Svstem
L	751 OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	6.34	Hours
1	Factors 7.13 h							
_			T			0.88934 [SYS 06140	01 .88934200 - \$	Svstem
L	751 OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.97	Hours
1	Factors 1.09 h							
						0.88934 [SYS 06140	01 .88934200 - 9	Svstem

1390.19 d 1.015 -- FY00 Escalation --Factors

0000 NONE

Line Item SYS - Contingency And Escalation

A5C SUPPLIES

BOE

Resources

s		Cost Element	Skill		Department		Curve	Quantity	Units
(CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	3.057.89	Dollars
Fa	ictors	3057.89 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	2.017.44	Dollars

C210S Facilities Mgmt & Maintenance

2017.44 Dollars

Activity ID: 1EFB0525	Description: Site Services Cluster Landlord Funtions, FY02	Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
1	Corrective maintenance	1.00	each	HC	20	20	433	115	0	548	153	701
1a	Corrective maintenance	1.00	each	HC	899	899	19.375	5.171	0	24.546	6.839	31.386
1b	Corrective maintenance	0.65	each	HC	1.964	1.277	27.533	7.341	0	34.874	9.719	44.594
3	Preventive maintenance	1.00	each	HC	3	3	74	13	0	87	26	113
3a	Preventive maintenance	1.00	each	HC	152	152	3.324	575	0	3.899	1.173	5.072
3b	Preventive maintenance	0.65	each	HC	331	215	4.718	816	0	5.534	1.666	7.200
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	13.278	13.278	0	13.278
	To	tal for Activit	v 1FFB0525			2 566	55 458	14 031	13 278	82 766	19 577	102 342

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099.

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Baseline Devl WBS Filter 1EFB Activity Filter *

ilter * Starts In FY

The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

Approximately 1 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$818 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99

Basis for adjustment - None.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 30.77% (includes Linemen)

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

s		Cost Element	Skill	Department	Curve	Ouantity	Units
	750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	1.30	Hours
	Factors	1.46 h					
Г					0.88934 [SYS 06140	01 .88934200 - Ş	Svstem
L	750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	1.41	Hours
1	Factors	1.58 h					
г		1			0.88934 [SYS 06140		
L	750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	0.86	Hours
1	Factors	0.97 h					
Г				[0.88934 [SYS 06140		
L	750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	1.88	Hours
-	Factors	2.11 h					
Г		T			0.88934 [SYS 06140		
L	750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	1.79	Hours
-	Factors	2.01 h				.,	
Г	750	OTDAIGUIT TIME DAGE	OCCO EL FOTDIOLANO	1/54011 1 1 1/0% 0 00 1 1	0.88934 [SYS 06140		
L	750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	2.091	Hours
-	Factors	2.35 h			0.00004 [0.00.004.40	01 00004000 0	S
Γ	750	STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	VEAUL Indust/Cita Crus Ctachuarkara	0.88934 [SYS 06140		Hours
L	Factors		CU40 IMAINTENANCE MACHINIST (INCLEXI)	RETURN IIII UUSI/SILE SIVS SLEEIWOIKEIS	Linear	0.141	Hours
-	raciors	0.16 h			0.88934 [SYS 06140	n1 00024200 G	System
ſ	750	STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Style Steelworkers	0.00934 1313 00140 Linear		Hours
	Factors	0.97 h	C040 IMAINTENANCE MACHINIST MICLEXD	KETOTT IIIIdus//Site SIVs Steetworkers	Lilleal	0.001	Houis
	i aciors	0.37			0.88934 [SYS 06140	ni 88934200 - S	System
	750	STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Stys Steelworkers	Linear		Hours
-	Factors	0.81 h	COTO IIVI/AII EI VAIVOE IVI/ACI III VICI EXD	NETOT IIII III III III III III III III III	Ellicai	0.721	ilouis
	- 1101015	5.5			0.88934 [SYS 06140	01 88934200 - 9	System
	750	STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear		Hours
	Factors	0.97 h					
					0.88934 [SYS 06140	01 .88934200 - S	System
_		•	•	•			

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Ba
WBS Filter 1E
Activity Filter *

Baseline Devl 1EFB

1EFB0525	Baseline Cost ar	nd Basis of Estimate	WBS Filter 1EFB Activity Filter *	Starts In FY *
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelwork		1.48 Hours
Factors 1.66 h			0.00024 ISVC 00	C4.4001 000034000 Cyctom
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwork		614001 .88934200 - Svstem 2.98 Hours
Factors 3.35 h				
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwork		614001 .88934200 - Svstem 0.58 Hours
Factors 0.65 h	1 CUOU IFLUIVIBERS AND FIFEFITTERS	KETOH IIIIdust/Site Sivs Steelworki	ers i Linear	U.JOIHUUIS
				614001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwork	ers Linear	0.47 Hours
Factors 0.53 h			0.88934 ISYS 06	614001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL WORKE	KE10H Indust/Site Srvs Steelwork	ers Linear	1.27 Hours
Factors 1.43 h				
750 STRAIGHT TIME BASE	R070 WASTE TREATMENT OPERATOR A	KE10H Indust/Site Srvs Steelwork		614001 .88934200 - Svstem 0.44 Hours
Factors 0.49 h	I NOTO INVASTE INCATINICINI OPERATOR A	TIL TOTA IIII QUSI/SILE SIVS SLEEIWOIKI	EI3 Lilled	U.4411 10UIS
				614001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelwork	ers Linear	0.07 Hours
Factors 0.08 h			0.88934 ISYS 06	614001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelwork		0.06 Hours
Factors 0.07 h				
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelwork		61400] .88934200 - System 0.04 Hours
Factors 0.05 h	COTO CARPENTERS	RETOTI IIIIdusi/Site Sivs Steelwork	ers Linear	0.04 110015
				61400] .88934200 - System
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwork	ers Linear	0.11 Hours
Factors 0.12 h			0.88934 1575.06	61400] .88934200 - System
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwork	ers Linear	0.10 Hours
Factors 0.11 h				
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwork		614001 .88934200 - System 0.09 Hours
Factors 0.1 h	1 CO20 IELECTRICIANS	KETOH IIIIdus//Site Sivs Steelworki	ers i Lineal	0.0911100115
			0.88934 [SYS 06	614001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelwork	ers Linear	0.04 Hours
Factors 0.05 h			0.88934 1575.06	614001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelwork		0.04 Hours
Factors 0.04 h				
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Save Steelwork	0.88934 [SYS 06 ers Linear	614001 .88934200 - Svstem 0.01 Hours
Factors 0.01 h	1 C040 IIVIAINTENANCE MACHINIST (IIICI EXD	RETURN IIII III III III III III III III III	ers i Linear	U.UTIHOUIS
				614001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelwork	ers Linear	0.04 Hours
Factors 0.05 h			0 8803V 16A6 U	614001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelwork	ers Linear	0.07 Hours
Factors 0.08 h				
			0.88934 [SYS 06	61400] .88934200 - System

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WBS No: Activity ID:

1EFB15 1EFB0525			Rockv Flats Baseline Cost ar			Proiect WBS Filter Activity Filter	Baseline Devl 1EFB *	Starts In FY *
751 OVI	ERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworker		Linear	0.03 Hours
Factors C	0.03 h						0.00024 [CVC.0C4.4	001 .88934200 - Svstem
751 OVI	ERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KF10H	Indust/Site Srvs Steelworker		U.86934 1515 0614	0.03 Hours
	0.03 h							001 .88934200 - System
751 OVI	ERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworker	3	Linear	0.15 Hours
ctors (0.17 h			Ī			0.88934 [SYS 0614	001 .88934200 - Svstem
	ERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworker	5	Linear	0.06 Hours
ctors (0.07 h			1			0.88934 [SYS 0614	001 .88934200 - Svstem
	ERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworker	6	Linear	0.02 Hours
ctors (0.02 h						0.88934 [SYS 0614	001 .88934200 - Svstem
ASC SUF	PPLIES	0000	NONE	C210S	Facilities Mamt & Maintenan	ce	Linear	115.37 Dollars
	127.81 d		1.015 FY00 Escalation				0.88934 [SYS 0614	00] .88934200 - System
redictab he resou acklog, he propo as appli	le, as such a model was gen rces necessary to perform m and projected work load. T sal value was then modeled ed. The percentage of main	erated aintend hese in to each	elated processes necessary to and used to estimate the budg ance activities is: A review of tems were the basis from which h cluster based on the number e effort (labor Type) required actions in the RFCSS controll	etary r f the a RFCSS of mair	equirements of this arctual costs accrued du proposed, negotiated, tenance actions associ ch maintenance action	nd all RFCSS wring FY 98, and was awa ated with t is based or	managed clusters. 'RFCSS planned main' arded the Site mainte that cluster in FY98 the average number	The basis of estimate tenance performance, enance contract KH8000 , and the proposed val

Approximately 44 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$832.64 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99 Basis for adjustment - None.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 30.77% (includes Linemen)

Maint. Mech 13.85% Painter 10.77%

Pipefitter 23.08%

Metal Worker 4.62%

Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Line Item 1a - 0 BOE

3	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	38.73	Hours
Factors	43.55 h							
						0.88934 [SYS 06140	01 .88934200 - S	System
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	58.10	Hours
Factors	65.33 h							
		-				0.88934 [SYS 06140	01 .88934200 - S	System

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Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filter

Baseline Devl 1EFB

	baseline	Cost and Basis of Estimate Activity Fig.	ter * Starts In FY *
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 62.94 Hours
Factors 70.77 h			
			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 93.59 Hours
Factors 105.24 h			0.00004 [0.00.001.0001.0001.000
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400] .88934200 - Svstem Linear 83.92 Hours
Factors 94.36 h	I CUZU IELECTRICIANS	VE IOU IIIIdazi/Oife 21/2 Offerimolkerz	Lineal 63.92IHOUIS
1 44.075 34.00 11			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 80.15IHours
Factors 90.12 h			
			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST	(incl Exp KE10H Indust/Site Srvs Steelworkers	Linear 6.46 Hours
Factors 7.26 h			
		// LE L/E/OL/ L/OL/ O. O. L/OL/	0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	I CO40 IMAINTENANCE MACHINIST	(incl Exp KE10H Indust/Site Srvs Steelworkers	Linear 38.73 Hours
Factors 43.55 h			0.88934 ISYS 0614001 .88934200 - System
750 STRAIGHT TIME BASE	CO40 MAINTENANCE MACHINIST	(incl Exp KE10H Indust/Site Srvs Steelworkers	U.00934 1313 0014001.80934200 - 3vsterii Linear 32.27 Hours
Factors 36.29 h	T COTO INVALENTACE INVACINING	THE EXP TALLET III GGSVOIC OLYS OCCIVORORS	Linear DE.ETTITOUIS
			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear 66.17 Hours
Factors 74.4 h			
			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear 38.73 Hours
Factors 43.55 h			0.00004 [0]/0.0044001 00004000 0
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTE	RS KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400] .88934200 - System Linear 20.97 Hours
Factors 23.58 h	C080 PLUMBERS AND PIPEFITTE	RETURN IIII IIII SIVS Steelworkers	Lineai 20.97[Hours
<i>Tuciors</i> 23.30 II			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTE	RS KE10H Indust/Site Srvs Steelworkers	Linear 25.83lHours
Factors 29.04 h			
			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTE	RS KE10H Indust/Site Srvs Steelworkers	Linear 133.44 Hours
Factors 150.04 h			
	T I		0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL	WORKE KE10H Indust/Site Srvs Steelworkers	Linear 57.02 Hours
Factors 64.12 h			0.00034 [CVC.064400] 0.0034300 Cyceter
750 STRAIGHT TIME BASE	DOZO WASTE TREATMENT ORED	ATOR A KE10H Indust/Site Srvs Steelworkers	0.88934
Factors 21.78 h	I NOTO IWASTE TREATIVIENT OPER	ATON A VETOIT IIIIuusvoite Siys Steelwolkeis	Lilleal 19.3/1⊓0uls
21.70 11			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 1.94 Hours
Factors 2.18 h			
			0.88934 [SYS 0614001.88934200 - System
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 2.91 Hours
Factors 3.27 h			
			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 3.15 Hours
Factors 3.54 h			0.00004 [0.00.0001 0.0004000 0
			0.88934 [SYS 061400] .88934200 - System

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WBS No: Activity ID:

1EFB15 1EFB0525

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Austrian Tile Baseline Devl 1EFB

	Daseille Cost	Activity Filte	er * Starts In FY *
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 4.68 Hours
Factors 5.26 h			
			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 4.01 Hours
Factors 4.51 h			0.88934 [SYS 061400] .88934200 - \$vstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 4.20 Hours
Factors 4.72 h	I OVED TEELOTTMONTO	TETOT IIII MAGA SITO SITO SITOTION	EIIIVAI IIIVAIV
			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Ex	KE10H Indust/Site Srvs Steelworkers	Linear 0.32 Hours
Factors 0.36 h			
==4 0\(\text{SPTMF} \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	0040 1444475444054440444477777		0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE. Factors 1.81 h	C040 MAINTENANCE MACHINIST (incl Ex	D KE10H Indust/Site Srvs Steelworkers	Linear 1.61 Hours
raciors 1.01 II			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Ex	rp KE10H Indust/Site Srys Steelworkers	Linear 1.94 Hours
Factors 2.18 h		Z TETOT IIIMZOVOMO SITO STOCKIOTIONO	
			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear 1.94 Hours
Factors 2.18 h			
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	0.88934
Factors 3.72 h	CU/U PAINTERS	KETUH Indust/Site Srvs Steelworkers	Linear 3.31 Hours
raciors 5.72 II			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear 1.29 Hours
Factors 1.45 h			
			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear 1.05 Hours
Factors 1.18 h			
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400] .88934200 - System Linear 6.67 Hours
Factors 7.5 h	1 C000 IFLOWIBERS AND FIFEFITTERS	RETURN IIII III III III III III III III III	Lilleal 0.071Hours
14015 1.0			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C090 STRUCTURAL AND METAL WORK	KE10H Indust/Site Srvs Steelworkers	Linear 2.85 Hours
Factors 3.21 h			
			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	R070 WASTE TREATMENT OPERATOR	A KE10H Indust/Site Srvs Steelworkers	Linear 0.97 Hours
Factors 1.09 h			0 0000 / POVO 00 / 1001 0000 / 100 - 0
A5C SUPPLIES	0000 NONE	C210S Facilities Momt & Maintenance	0.88934 [SYS 0614001 .88934200 - System Linear 5.170.98 Dollars
Factors 5728.46 d	1.015 FY00 Escalation	UZTUS Facilities Midmt & Maintenance	Linear 5.170.98 Dollars
140015 3120.40 U	1.013 F100 ESCAIALION		0.00004 100/0.0044001 00004000 0

Line Item 1b - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 2 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98 Item Desc - Fiscal Year Corrective Maintenance

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0.88934 [SYS 061400] .88934200 - System

1EFB15 **Rocky Flats Closure Project** 1EFB0525 Activity ID: **Baseline Cost and Basis of Estimate**

Baseline Devl Proiect WBS Filter 1EFB Activity Filter

Starts In FY *

Breakdown of Data: Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$40007.5 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 65% of the FY 99 budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficency return.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 32.31% (includes Linemen)

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

WBS No:

es	Cost Element	Skill		Department	Curve	Quantity Units
	50 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	84.59 Hours
Fac	otors 95.12 h					
					0.88934 [SYS 06140	
_ 7	50 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	126.90 Hours
Fac	tors 142.69 h					
_		Local Carpenters	145 4 6 1 1		0.88934 [SYS 06140	
	50 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	137.47 Hours
Fac	tors 154.58 h				0.88934 [SYS 06140	01 99034300 Systom
7	50 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	0.86934 1313 00140 Linear	183.29 Hours
	etors 206.1 h	1 0020 ILLEOTRION INC	I IXE IVII	middsvoite orvs otectworkers	Linear	100.231110013
1 40	20011				0.88934 [SYS 06140	01 .88934200 - Svstem
7	50 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	42.30 Hours
Fac	etors 47.56 h					
					0.88934 [SYS 06140	
	50 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	175.06 Hours
Fac	tors 196.84 h					
_	ZEO OTRAJOLIT TIME RAGE	C020 ELECTRICIANS	1/54011	1 1 1/0: 0 0: 1	0.88934 [SYS 06140	01 .88934200 - Svstem 204.42 Hours
	tors 229.86 h	I CU20 IELECTRICIANS	I KE10H	Indust/Site Srvs Steelworkers	Linear	204.42IHours
гас	229.86 II				0.88934 [SYS 06140	01 99034200 Systom
7	50 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KF10H	Indust/Site Srys Steelworkers	0.86934 1313 00140 Linear	84.59 Hours
	etors 95.12 h		/ IXE O	IIII AAAA AAAA AAAAA AAAAAAAAAAAAAAAAA	Elliodi	O 1.OOH IOGIO
					0.88934 [SYS 06140	01_88934200 - System
7	50 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exc	KE10H	Indust/Site Srvs Steelworkers	Linear	70.50 Hours
Fac	tors 79.27 h					
					0.88934 [SYS 06140	
	50 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exc	KE10H	Indust/Site Srvs Steelworkers	Linear	14.10 Hours
Fac	<i>etors</i> 15.85 h				0.00004 [0)/0.00440	01 00004000 0 4
7	50 STRAIGHT TIME BASE	C070 PAINTERS	I/E40II	Indust/Site Srvs Steelworkers	0.88934 [SYS 06140 Linear	01.88934200 - System 84.59 Hours
	etors 95.12 h	I CUTU IPAINTERS	NE IUH	illinnarolle olas oleelmolkeis	Linear	04.09 <u> </u>
rac	1013 99.12 11				0.88934 [SYS 06140	01 88934200 - System
7	50 STRAIGHT TIME BASE	C070 PAINTERS	KE10H	Indust/Site Srvs Steelworkers	U.00334 1313 00140	144.51 Hours
	etors 162.49 h				E111930	1 1 10 111 10 110
					0.88934 [SYS 06140	01 .88934200 - Svstem
						•

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Ba
WBS Filter 1E
Activity Filter *

Baseline Devl 1EFB

1EFB0525	Baseline Cost a	nd Basis of Estimate	WBS Filter 1EFB Activity Filter *	Starts In FY *
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwork		56.40 Hours
Factors 63.42 h				
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwork		1001 .88934200 - Svstem 45.81 Hours
Factors 51.51 h	1 COSO IFLOWIDENS AND FIFETH TENS	TETOTE IIIIdust/Site Sivs Steelwork	eis Lilieai	45.611110015
				1001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwork	ers Linear	291.44 Hours
Factors 327.7 h			0.88934 ISYS 0614	1001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL WORKE	KE10H Indust/Site Srvs Steelwork	ers Linear	124.54 Hours
Factors 140.04 h				
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelwork		1001 .88934200 - Svstem 6.34 Hours
Factors 7.13 h	T COTO ICAN ENTENS	TL TOTT IIII GUSUSILE SIVS SIEEIWOIN	EI3 LIIIEAI	0.541110013
				1001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelwork	ers Linear	6.87 Hours
Factors 7.73 h			0.88934 ISYS 0614	1001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelwork		4.23 Hours
Factors 4.76 h				
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwork		1001 .88934200 - Svstem 9.17 Hours
Factors 10.31 h	1 GOZO ILLEGINICIANS	RETOIT IIIdust/Site Sivs Steetwork	lers Linear	9.17 10015
				100] .88934200 - System
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwork	ers Linear	2.12 Hours
Factors 2.38 h			0.88934 ISVS 0614	100] .88934200 - System
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwork		10.22 Hours
Factors 11.49 h				
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwork		100] .88934200 - System 8.75 Hours
Factors 9.84 h	1 CO20 IELECTRICIANS	RETUR IIIIdus//Site Sivs Steelwork	ers Linear	6./SIMOUIS
				1001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelwork	ers Linear	4.23 Hours
Factors 4.76 h			0.88934 [SVS 0614	1001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelwork	ers Linear	0.70 Hours
Factors 0.79 h				
754 OVERTIME BASE & BBE	OO 40 MANINTENANCE MACHINIOT (; . I.E.	1/51011 1 1/0" 0 0 1 1		1001 .88934200 - System
751 OVERTIME BASE & PRE. Factors 3.96 h	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelwork	ers Linear	3.52 Hours
3.30			0.88934 ISYS 0614	1001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelwork	ers Linear	7.22 Hours
Factors 8.12 h			ACC 20/21 Access 0	1001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelwork		4.23 Hours
Factors 4.76 h		The state of the s	Ellivai	1.2011100110
	T	T.,		1001 .88934200 - Svstem
751 OVERTIME BASE & PRE. Factors 3.17 h	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwork	ers Linear	2.82 Hours
Factors 3.17 h				

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl 1EFB

		Daseline Cost at	iu Dasis	Activ	ity Filter *		Starts In FY *
751 OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers		Linear	14.57 Hours
Factors 16.38 h							
		_		T		0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers		Linear	2.29 Hours
Factors 2.58 h							
						0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers		Linear	6.23 Hours
Factors 7 h							
						0.88934 [SYS 06140	01 .88934200 - Svstem
A5C SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance		Linear	11.294.10 Dollars
Factors 1.015 FY00 Escalation		12511.7 d					

ractors 1.015 -- F100 Escalation --

0.88934 [SYS 061400] .88934200 - System

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 1 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98 Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$133 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99 Basis for adjustment - None.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50% Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

S	Cost Element		Skill		<u>Department</u>	Curve	Ouantity Units
750 ST	TRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.73 Hours
Factors	1.94 h						
						0.88934 [SYS 0614	001 .88934200 - Svstem
750 ST	TRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.30 Hours
Factors	1.46 h						
						0.88934 [SYS 0614	001 .88934200 - Svstem
750 ST	TRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.20 Hours
Factors	0.22 h						
						0.88934 [SYS 0614	001 .88934200 - Svstem
751 O\	VERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.09 Hours
Factors	0.1 h						
						0.88934 [SYS 0614	001 .88934200 - Svstem
751 O\	VERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.06 Hours
Factors	0.07 h						
						0.88934 [SYS 0614	001 .88934200 - Svstem

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl 1EFB

			Activity Filter	*	Starts In FY *
751 OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	0.01 Hours
Factors 0.01 h					
				0.88934 [SYS 06140	01 .88934200 - Svstem
A5C SUPPLIES	0000	NONE	C210S Facilities Mamt & Maintenance	Linear	12.82 Dollars
Factors 14.2 d		1.015 FY00 Escalation			

Factors Line Item 3a - Preventive maintenance

0.88934 [SYS 061400] .88934200 - System

Ouantity

Curve

Units

BOE

corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS. ·Approximately 1 preventative maintenance work actions are expected.

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to

Data Source - MMS and P&I Reporting System SVAR for FY98 Item Desc - Fiscal Year Preventive Maintenance Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$5957 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99 Basis for adjustment - None.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Cost Element

Maint. Mech 37.50% Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Etement	Skiti	Department	Curve	Quantity Onus
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	77.47 Hours
Factors 87.11 h				
			0.88934 [SYS 06140	01 .88934200 - Svstem
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl.	Exp KE10H Indust/Site Srvs Steelworkers	Linear	58.10 Hours
Factors 65.33 h				
			0.88934 [SYS 06140	01 .88934200 - Svstem
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	8.87 Hours
Factors 9.97 h				
			0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	3.88 Hours
Factors 4.36 h				
			0.88934 ISYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl.	Exp KE10H Indust/Site Srvs Steelworkers	Linear	2.91 Hours
Factors 3.27 h				
			0.88934 ISYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	0.44 Hours
Factors 0.5 h				
			0.88934 [SYS 06140	01 .88934200 - Svstem
A5C SUPPLIES	0000 INONE	C210S Facilities Mamt & Maintenance	Linear	574.56 Dollars
Factors 636.5 d	1.015 FY00 Escalation			
			0.88934 [SYS 06140	01 .88934200 - System

Department

Line Item 3b - Preventive maintenance

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to BOE

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WBS No: 1EFB15 Rockv Flats Closure Proiect
Activity ID: 1EFB0525 Baseline Cost and Basis of Estimate

Proiect Baseline Devl

WBS Filter 1EFB
Activity Filter *

Filter * Starts In FY

Units

corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 15 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$867.27 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 65% of the FY 99

Department

budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficency return.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50% Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	169.20 Hours
Factors 190.25 h				
			0.88934 [SYS 06140	01 .88934200 - Svstem
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl	Exp KE10H Indust/Site Srvs Steelworkers	Linear	126.90 Hours
Factors 142.69 h				
			0.88934 [SYS 06140	01 .88934200 - Svstem
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	19.36 Hours
Factors 21.77 h				
			0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	8.46 Hours
Factors 9.51 h				
			0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl	Exp KE10H Indust/Site Srvs Steelworkers	Linear	6.34 Hours
Factors 7.13 h				
			0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	0.97 Hours
Factors 1.09 h				
			0.88934 [SYS 06140	01 .88934200 - Svstem
A5C SUPPLIES	0000 NONE	C210S Facilities Mgmt & Maintenance	Linear	1.254.90 Dollars
<i>Factors</i> 1390.19 d	1.015 FY00 Escalation			
			0.88934 [SYS 06140	01 .88934200 - System

Line Item SYS - Contingency And Escalation

BOE

Resources

es		Cost Element		Skill		Department	Curve	Ouantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	9.115.50	Dollars
	Factors	9115.50 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	4.162.13	Dollars

Factors 4162.13 Dollars

Activity ID: 1EFB0530 Description: Site Services Cluster Landlord Funtions, FY03

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2 Schedule Risk

Cost Risk

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter

Baseline Devl 1EFB

							Acti	vity Filter *		Sta	ırts In FY *	
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
1	Corrective maintenance	1.00	each	HC	20	20	433	115	0	548	150	698
1a	Corrective maintenance	1.00	each	HC	899	899	19.375	5.171	0	24.546	6.704	31.250
1b	Corrective maintenance	0.65	each	HC	1.964	1.277	27.533	7.341	0	34.874	9.527	44.401
3	Preventive maintenance	1.00	each	HC	3	3	74	13	0	87	26	112
3a	Preventive maintenance	1.00	each	HC	152	152	3.324	575	0	3.899	1.150	5.049
3b	Preventive maintenance	0.65	each	HC	331	215	4.718	816	0	5.534	1.633	7.166
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	24.524	24.524	0	24.524
	Tot	al for Activi	ty 1EFB0530):		2.566	55.458	14.031	24.524	94.012	19.188	113.200

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 1 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$818 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99

Basis for adjustment - None.

The percentage of maintenance effort (labor Type) is as follows:

15.38%

Electrician 30.77% (includes Linemen)

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

S Cost Element	Skill	Department	Curve	Ouantity Units
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	1.30 Hours
Factors 1.46 h				
			0.88934 [SYS 06140	01 .88934200 - Svstem
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	1.41 Hours
Factors 1.58 h				
			0.88934 [SYS 06140	01 .88934200 - Svstem
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	0.86 Hours
Factors 0.97 h				
			0.88934 [SYS 06140	01 .88934200 - Svstem
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	2.09 Hours
Factors 2.35 h				
			0.88934 [SYS 06140	01 .88934200 - Svstem
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	1.88 Hours
Factors 2.11 h				
			0.88934 [SYS 06140	0] .88934200 - System

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filt

Baseline Devl 1EFB

	baseline v	Cost and Basis of Estimate Activity Fi	lter * Starts In FY *
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 1.79 Hours
Factors 2.01 h			
oth Moutter:	0040 144447		0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	I C040 IMAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers	Linear 0.14 Hours
Factors 0.16 h			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	CO40 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers	U.86934 1313 0614001.86934200 - System Linear 0.86 Hours
Factors 0.97 h		IIIO END I TE IOTI III MAGO ONO OTVO OTO OTVO	
			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers	Linear 0.72 Hours
Factors 0.81 h			
750 OTDAIGUIT TIME DAGE	COZO DAINITEDO	IXEAOLL III de et/Oite On a Ote de celes et	0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE Factors 0.97 h	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear 0.86 Hours
raciors 0.97 II			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear 1.48lHours
Factors 1.66 h			
			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTER	RS KE10H Indust/Site Srvs Steelworkers	Linear 0.58 Hours
Factors 0.65 h			
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTER	RS KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400] .88934200 - System Linear 2.98 Hours
Factors 3.35 h	1 C080 IPLUMBERS AND PIPEFITTER	RETURN IMMUSI/SILE SIVS SLEEIWOIKEIS	Linear 2.98 Hours
<i>ructors</i> 3.33 II			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTER	RS KE10H Indust/Site Srvs Steelworkers	Linear 0.47 Hours
Factors 0.53 h			
T			0.88934 [SYS 061400] .88934200 - System
750 STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL V	VORKE KE10H Indust/Site Srvs Steelworkers	Linear 1.27 Hours
Factors 1.43 h			0.00004 [0)/0.004400] 00004000 0
750 STRAIGHT TIME BASE	POZO WASTE TREATMENT OPERA	ATOR A KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400] .88934200 - System Linear 0.44 Hours
Factors 0.49 h	1 ROTO IWASTE TREATMENT OPERA	ATOR A RETURN IIII dust/Site Sivs Steetworkers	Lilleal 0.441⊓outs
1 4010/3 0.40 11			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 0.07 Hours
Factors 0.08 h			
			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear 0.06 Hours
Factors 0.07 h			0.00004 [0)/0.004400] 00004000 0
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400] .88934200 - System Linear 0.04 Hours
Factors 0.05 h	COTO ICARPENTERS	RETURN IIII III III III III III III III III	Lilleal 0.041Hours
0.00			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 0.09 Hours
Factors 0.1 h			
			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 0.11 Hours
Factors 0.12 h			0.00004 [0.000.0001.00004000.00
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Cita Saya Stanburg/cara	0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE. Factors 0.11 h	I CUZU IELEC I KICIANS	KE10H Indust/Site Srvs Steelworkers	Linear 0.10lHours
uctors U.11 II			0.88934 [SYS 061400] .88934200 - System
			0.0000T 1010 0017001.00007200 ° 075lciii

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl 1EFB

	baseline Cost and b	Activity Filter	* Starts In FY *
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp KE	10H Indust/Site Srvs Steelworkers	Linear 0.04 Hours
Factors 0.04 h			
			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp KE	10H Indust/Site Srvs Steelworkers	Linear 0.04 Hours
Factors 0.05 h			
			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp KE	10H Indust/Site Srvs Steelworkers	Linear 0.01 Hours
Factors 0.01 h			
			0.88934 [SYS 0614001.88934200 - System
751 OVERTIME BASE & PRE.	C070 PAINTERS KE	10H Indust/Site Srvs Steelworkers	Linear 0.04lHours
Factors 0.05 h			0.00004 [0]/0.0044001 00004000 0
751 OVERTIME BASE & PRE.	C070 PAINTERS KE	10H Indust/Site Srvs Steelworkers	0.88934 [SYS 061400] .88934200 - System Linear 0.07 Hours
	I CU/U IPAINTERS KE	TUH IIndust/Site Srvs Steelworkers	Linear 0.07lHours
Factors 0.08 h			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS KE	10H Indust/Site Srvs Steelworkers	U.88934 1313 0614001 88934200 - SVSterii Linear 0.03 Hours
Factors 0.03 h	1 COOO II LOIVIDENS AND I II EI II I ENG	TOTA III Idds// Site Sivs Steel Workers	Lineal 0.03ii louis
1 401075 0.00 11			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS KE	10H Indust/Site Srvs Steelworkers	Linear 0.03 Hours
Factors 0.03 h			
			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS KE	10H Indust/Site Srvs Steelworkers	Linear 0.15 Hours
Factors 0.17 h			
			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	C090 STRUCTURAL AND METAL WORKE KE	10H Indust/Site Srvs Steelworkers	Linear 0.06 Hours
Factors 0.07 h			
			0.88934 [SYS 061400] .88934200 - System
751 OVERTIME BASE & PRE.	R070 WASTE TREATMENT OPERATOR A KE	10H Indust/Site Srvs Steelworkers	Linear 0.02 Hours
Factors 0.02 h			
450 OLIDBUID	2000 14045	400 5 1111 14 4 0 14 1 1	0.88934 [SYS 061400] .88934200 - System
A5C SUPPLIES		10S Facilities Mamt & Maintenance	Linear 115.37 Dollars
<i>Factors</i> 127.81 d	1.015 FY00 Escalation		0.00004 [0.000.000.000.000.000.000.000.000.000.
			0.88934 [SYS 061400] .88934200 - System

Line Item 1a - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 44 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$832.64 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99 Basis for adjustment - None.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 30.77% (includes Linemen)

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Baseli
WBS Filter 1EFB
Activity Filter *

Baseline Devl 1EFB

Starts In FY *

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resou	rces
-------	------

	Cost Element	Skill		Department	Curve	Ouantity	Units
	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H In	dust/Site Srvs Steelworkers	Linear	38.73	Hours
Factors	43.55 h						•
750	OTDAIOLIT TIME DAGE	OO40 OARDENTERO	1/54011	1 1/0% 0 00 1 1	0.88934 [SYS 06140		
	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H IIn	dust/Site Srvs Steelworkers	Linear	58.10	Hours
Factors	65.33 h				0.00004 10000.00440	01 00004000	04
750	STRAIGHT TIME BASE	C010 CARPENTERS	IZE1011 In	dust/Site Srvs Steelworkers	0.88934 [SYS 06140 Linear	01.88934200 - 3	Hours
Factors	70.77 h	I CUIU ICARPENTERS	KETUH III	idusi/Sile Sivs Steelworkers	Linear	62.94	inouis
raciors	70.77				0.88934 [SYS 06140	01 88034300	Systom
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H In	dust/Site Srvs Steelworkers	0.00934 1313 00140 Linear		Hours
Factors	105.24 h	1 0020 IEEEOTTIONATO	I IXE TOTT IIII	dustrone of vs oteciwonicis	Linear	30.00	II IOUIS
T delors	100.21				0.88934 [SYS 06140	01 88934200 - :	System
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KF10H In	dust/Site Srvs Steelworkers	Linear		Hours
Factors	94.36 h	. John Helevillion III			Eli issai	0010=	
					0.88934 [SYS 06140	0] .88934200 -	System
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H In	dust/Site Srvs Steelworkers	Linear	80.15	Hours
Factors	90.12 h						
	T				0.88934 [SYS 06140	0] .88934200 -	System
750	STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Ex	p KE10H In	dust/Site Srvs Steelworkers	Linear	6.46	Hours
Factors	7.26 h						
	I				0.88934 [SYS 06140		
750	STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Ex	p KE10H In	dust/Site Srvs Steelworkers	Linear	32.27	Hours
Factors	36.29 h						
		T			0.88934 ISYS 06140		
	STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Ex	(D KE10H IIn	dust/Site Srvs Steelworkers	Linear	38.73	Hours
Factors	43.55 h						•
750	OTDAIOLIT TIME DAGE	C070 PAINTERS	1/54011	1 1/0% 0 00 1 1	0.88934 [SYS 06140	01 .88934200 - 3	System
	STRAIGHT TIME BASE	I CO/O IPAINTERS	KE10H III	dust/Site Srvs Steelworkers	Linear	66.17	IHours
Factors	74.4 h				0.00024 [CVC 06440	01 00004000	Custom
750	STRAIGHT TIME BASE	C070 PAINTERS	KE10H In	dust/Site Srvs Steelworkers	0.88934 [SYS 06140 Linear	20 72	Hours
Factors	43.55 h	I COTO IFAINTERS	NE IUIT III	idusi/Site Sivs Steelworkers	Lilledi	30.73	inouis
ruciors	40.00				0.88934 [SYS 06140	01 88934200 -	System
750	STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H In	dust/Site Srvs Steelworkers	Linear		Hours
Factors	23.58 h	TOOUT IT ENTITED THE ELLIPTIC	11121011	NAME OF THE ORDER	Elitodi		II IOGIO
					0.88934 [SYS 06140	01 .88934200 -	System
750	STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H In	dust/Site Srvs Steelworkers	Linear	25.83	Hours
Factors	29.04 h						
					0.88934 [SYS 06140	01 .88934200 -	Svstem
750	STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H In	dust/Site Srvs Steelworkers	Linear	133.44	Hours
Factors	150.04 h						
					0.88934 [SYS 06140		
750	STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL WORKE	E KE10H In	dust/Site Srvs Steelworkers	Linear	57.02	Hours
Factors	64.12 h						
					0.88934 [SYS 06140	01 88934200 - 3	Svstem

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Ba
WBS Filter 1E
Activity Filter *

Baseline Devl 1EFB

R070 WASTE TREATMENT OPERATOR A C010 CARPENTERS C010 CARPENTERS C020 ELECTRICIANS C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwork KE10H Indust/Site Srvs Steelwork	0.8 eers 0.8 eers 0.8 eers 0.8 eers 0.8	Linear 88934 [SYS 061400] Linear 88934 [SYS 061400] Linear 88934 [SYS 061400] Linear 88934 [SYS 061400] Linear	2.91 Hours 1.88934200 - System 3.15 Hours 1.88934200 - System 1.94 Hours
C010 CARPENTERS C010 CARPENTERS C020 ELECTRICIANS C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwork KE10H Indust/Site Srvs Steelwork KE10H Indust/Site Srvs Steelwork	0.8 Sers 0.8 Sers 0.8 Sers 0.8 Sers	Linear 88934	2.91 Hours 1.88934200 - System 3.15 Hours 1.88934200 - System 1.94 Hours
C010 CARPENTERS C010 CARPENTERS C020 ELECTRICIANS C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwork KE10H Indust/Site Srvs Steelwork KE10H Indust/Site Srvs Steelwork	0.8 Sers 0.8 Sers 0.8 Sers 0.8 Sers	Linear 88934	2.91 Hours 1.88934200 - System 3.15 Hours 1.88934200 - System 1.94 Hours
C010 CARPENTERS C010 CARPENTERS C020 ELECTRICIANS C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwork KE10H Indust/Site Srvs Steelwork KE10H Indust/Site Srvs Steelwork	0.8 eers 0.8 eers 0.8 eers 0.8	88934 [SYS 061400] Linear 88934 [SYS 061400] Linear	1.88934200 - System 3.15 Hours 1.88934200 - System 1.94 Hours 1.88934200 - System
C010 CARPENTERS C020 ELECTRICIANS C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwork	cers 0.8	Linear 88934 [SYS 061400] Linear 88934 [SYS 061400]	3.15 Hours 1.88934200 - System 1.94 Hours 1.88934200 - System
C010 CARPENTERS C020 ELECTRICIANS C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwork	0.8 cers 0.8	88934 ISYS 0614001 Linear 88934 ISYS 0614001	1 .88934200 - Svstem 1.94 Hours 1 .88934200 - Svstem
C020 ELECTRICIANS C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwork	ers 0.8	Linear 88934 [SYS 061400]	1.94 Hours 1.88934200 - Şvstem
C020 ELECTRICIANS C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwork	ers 0.8	Linear 88934 [SYS 061400]	1.94 Hours 1.88934200 - Şvstem
C020 ELECTRICIANS		sers		
C020 ELECTRICIANS		sers		
C020 ELECTRICIANS			Lineal	4.01100018
	KE10H Indust/Site Srvs Steelwork	3.0		
	KE10H Indust/Site Srvs Steelwork		88934 [SYS 061400]	
		ers	Linear	4.68 Hours
		0.0	88934 [SYS 061400]	1 99034300 Syston
C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwork		Linear	4.20 Hours
OO 40 MAINTENANGE MAGUUNUOT (* I.E.	1/5/01/ 1 / //0// 0 0/ 1 /		88934 [SYS 061400]	
C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelwork	ers	Linear	1.61 Hours
		3.0	88934 [SYS 061400]	1.88934200 - System
C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelwork	ers	Linear	1.94 Hours
		0.4	00004 [00/0 004 400]	1 00004000 0
C040 MAINTENANCE MACHINIST (incl Exp.	KE10H Indust/Site Srys Steelwork		88934 [SYS 061400] Linear	0.32 Hours
OF TO THE WATER WA	THE TOTAL IMPAGE ON CONTROL	010	Linoai	0.02 10010
L	T			
C070 IPAINTERS	KE10H Indust/Site Srvs Steelwork	ers	Linear	3.31 Hours
		3.0	88934 [SYS 061400]	l .88934200 - Svstem
C070 PAINTERS	KE10H Indust/Site Srvs Steelwork		Linear	1.94 Hours
		•		
COSO PLLIMBERS AND DIPETITERS	KE10H Indust/Site Says Steelwork			1.88934200 - Svstem 1.29 Hours
COOO II LOWDLING AND I II LI II I LING	TIL TOTT IIII GGSVOIRE OTVS STEETWOLK	613	Lilleal	1.231110013
C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwork	ers	Linear	6.67 Hours
		0.5	88934 [SYS 061400]	I 88934200 - System
C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwork		Linear	1.05 Hours
COOL STRUCTURAL AND METAL WORKS	KE10H Indust/Site Save Steelmark			88934200 - Svstem. 1 2.85 Hours
CUSU ISTRUCTURAL AND WETAL WORKE	LE TOT IIIIUUSI/SILE SIVS STEEIWOFKI	EI2	Lifteat	ZIUONICO.5
			88934 [SYS 061400]	.88934200 - Svsterr
R070 WASTE TREATMENT OPERATOR A	KE10H Indust/Site Srvs Steelwork	ers	Linear	0.97 Hours
	C070 PAINTERS C070 PAINTERS C080 PLUMBERS AND PIPEFITTERS C080 PLUMBERS AND PIPEFITTERS C080 PLUMBERS AND PIPEFITTERS C090 STRUCTURAL AND METAL WORKE	C070 PAINTERS KE10H Indust/Site Srvs Steelwork C070 PAINTERS KE10H Indust/Site Srvs Steelwork C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelwork C090 STRUCTURAL AND METAL WORKE KE10H Indust/Site Srvs Steelwork	C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers 0.8 C070 PAINTERS KE10H Indust/Site Srvs Steelworkers 0.9 C070 PAINTERS KE10H Indust/Site Srvs Steelworkers 0.9 C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers 0.9 C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers 0.9 C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers 0.9 C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers 0.9 C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers 0.9 C080 STRUCTURAL AND METAL WORKE KE10H Indust/Site Srvs Steelworkers	CO40 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers Linear 0.88934 ISYS 0614001 C070 PAINTERS KE10H Indust/Site Srvs Steelworkers Linear C070 PAINTERS KE10H Indust/Site Srvs Steelworkers Linear C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers Linear C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers Linear C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers Linear C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers Linear C090 STRUCTURAL AND METAL WORKE KE10H Indust/Site Srvs Steelworkers Linear 0.88934 ISYS 0614001 C090 STRUCTURAL AND METAL WORKE KE10H Indust/Site Srvs Steelworkers Linear

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1EFB15 Rocky Flats Closure Project
1EFB0530 Baseline Cost and Basis of Estimate

0000 NONE

Proiect Baseline Devl WBS Filter 1EFB

Curva

Factors 5728.46 d 1.015 -- FY00 Escalation --

Line Item 1b - Corrective maintenance

A5C SUPPLIES

0.88934 [SYS 061400] .88934200 - System

Quantity Units

BOE

WBS No:

Activity ID:

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 2 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$40007.5 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 65% of the FY 99

budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficency return.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 32.31% (includes Linemen)

Cost Flomont

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Skill	Department	Curve	Quantity Units
C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	137.47 Hours
		0.88934 [SYS 06140	001 .88934200 - Svstem
C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	84.59 Hours
		0.88934 ISYS 06140	001 .88934200 - Svstem
C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	126.90 Hours
		0.88934 ISYS 06140	001 .88934200 - Svstem
C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	183.29 Hours
		0.88934 ISYS 06140	001 .88934200 - Svstem
C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	42.30 Hours
		0.88934 ISYS 06140	001 .88934200 - Svstem
C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	175.06 Hours
		0.88934 ISYS 06140	001 .88934200 - Svstem
C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	204.42 Hours
· · · · · · · · · · · · · · · · · · ·		0.88934 [SYS 06140	001 .88934200 - Svstem
	C010 CARPENTERS C010 CARPENTERS C010 CARPENTERS C020 ELECTRICIANS C020 ELECTRICIANS C020 ELECTRICIANS	C010 CARPENTERS KE10H Indust/Site Srvs Steelworkers C010 CARPENTERS KE10H Indust/Site Srvs Steelworkers C010 CARPENTERS KE10H Indust/Site Srvs Steelworkers C020 ELECTRICIANS KE10H Indust/Site Srvs Steelworkers C020 ELECTRICIANS KE10H Indust/Site Srvs Steelworkers C020 ELECTRICIANS KE10H Indust/Site Srvs Steelworkers	C010 CARPENTERS KE10H Indust/Site Srvs Steelworkers Linear

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 WBS No:
 1EFB15

 Activity ID:
 1EFB0530

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter

Baseline Devl 1EFB

121 20000	Baseline Cost	and Basis of Estimate	vity Filter *	Starts In FY *
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Ex		Linear	84.59 Hours
Factors 95.12 h				
750 OTDAIGUT TIME DAGE	COAO MANINTENIANICE MACCHINICT (in al Fi	I/F4011 Indust/Oits On a Ots shored and		1001 .88934200 - Svstem
750 STRAIGHT TIME BASE Factors 79.27 h	C040 MAINTENANCE MACHINIST (incl Ex	KD KE10H Indust/Site Srvs Steelworkers	Linear	70.50 Hours
13.21			0.88934 [SYS 0614	1001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Ex	KE10H Indust/Site Srvs Steelworkers	Linear	14.10 Hours
Factors 15.85 h				
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 ISYS 0614 Linear	1001 .88934200 - Svstem 144.51 Hours
Factors 162.49 h	- Jorg II All Till	THE TOTAL IMPOSE OF THE OWNER OF THE TOTAL IMPOSE OF THE OWNER OWNER OF THE OWNER OW	i Sali (SM)	111.011110410
			0.88934 [SYS 0614	1001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	84.59 Hours
Factors 95.12 h			0.00004 10000.004	1001 00004000 0
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 ISYS 0612 Linear	1001 .88934200 - Svstem 56.40 Hours
Factors 63.42 h	1 COSO IFEOWIBERS AND FIFEITITERS	RETOTI IIIIdus//Site Sivs Steelworkers	Lilleal	30.401110015
			0.88934 [SYS 0614	1001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	45.81 Hours
Factors 51.51 h				
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 0614 Linear	1001 .88934200 - Svstem 291.44 Hours
750 STRAIGHT TIME BASE Factors 327.7 h	C080 PLUMBERS AND PIPEFITTERS	KETOH Indust/Site Srvs Steelworkers	Linear	291.44 Hours
ruciois 321.1 II			0.88934 [SYS 0614	100] .88934200 - System
750 STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL WORKE	E KE10H Indust/Site Srvs Steelworkers	Linear	124.54 Hours
Factors 140.04 h				
				100] .88934200 - System
751 OVERTIME BASE & PRE. Factors 7.13 h	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	6.34 Hours
Factors 7.13 h			0.88934 [SVS.061/	100] .88934200 - System
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	6.87 Hours
Factors 7.73 h				
				1001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	4.23 Hours
Factors 4.76 h			0.88034 [575.0617	1001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	U.88934 1313 0012	
Factors 2.38 h	, data interpretation		. =	
1			0.88934 [SYS 0614	1001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	9.17 Hours
Factors 10.31 h			0.90024 15V5.054	1001 00024200 Cyatam
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	0.88934 1818 0612 Linear	1001 .88934200 - Svstem 8.75 Hours
Factors 9.84 h	I SAN INCLUSION OF THE PROPERTY OF THE PROPERT	THE COLUMN THE STATE OF THE STA	i Enigal	
			0.88934 [SYS 0614	1001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	10.22 Hours
Factors 11.49 h			0.00001 101/0	1001 0000 1000 0
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Ex	VELOUE Indust/Site Save Steelwarkers	0.88934 [SYS 0614 Linear	1001 .88934200 - Svstem 4.23 Hours
Factors 4.76 h	I CU4U IIVIAIIN I EINAINCE MACHINIST (INCLEX	AD NETUT IIIIUUSI/SIIE SIVS STEEIWOIKEIS	Linear	4.23IHOUIS
T.10 II			0.88934 [SYS 0614	100] .88934200 - System
			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	22 2,230

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Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl 1EFB

121 20000	Baseline Cost and Basis of Estimate	Activity Filter *	Starts In FY *
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs	s Steelworkers Linear	0.70 Hours
Factors 0.79 h			
			001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs	s Steelworkers Linear	3.52 Hours
Factors 3.96 h			
			001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C070 PAINTERS KE10H Indust/Site Srvs	s Steelworkers Linear	4.23 Hours
Factors 4.76 h			
			001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C070 PAINTERS KE10H Indust/Site Srvs	s Steelworkers Linear	7.22 Hours
Factors 8.12 h			
			001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS KD10H 776 Complex St	Steelworkers Linear	2.82 Hours
Factors 3.17 h			
			001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs	s Steelworkers Linear	14.57 Hours
Factors 16.38 h			
			001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs	s Steelworkers Linear	2.29 Hours
Factors 2.58 h			
			001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C090 STRUCTURAL AND METAL WORKE KE10H Indust/Site Srvs	s Steelworkers Linear	6.23 Hours
Factors 7 h			
		•	001 .88934200 - System
A5C SUPPLIES	0000 NONE C210S Facilities Mgmt 8	& Maintenance Linear	11,294.10 Dollars
<i>Factors</i> 12511.7 d	1.015 FY00 Escalation		
		0.88934 [SYS 0614	00] .88934200 - System

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 1 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$133 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99

Basis for adjustment - None.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50%

Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources Cost Element Skill Department Curve Quantity Units

Rocky Flats Closure Project Rasalina Cost and Rasis of Estimate

Proiect WBS Filter Baseline Devl 1EFB

Daseline Cost and Dasis of Estimate		OI Estimate	Activity Filter *	Starts In FY *				
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	;	Linear	1.73 Hours
Factors	1.94 h							
		1					0.88934 ISYS 06140	01 .88934200 - Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	}	Linear	1.30 Hours
Factors	1.46 h							
							0.88934 [SYS 06140	01 .88934200 - Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	3	Linear	0.20 Hours
Factors	0.22 h							
							0.88934 [SYS 06140	01 .88934200 - Svstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	;	Linear	0.09 Hours
Factors	0.1 h							
							0.88934 [SYS 06140	01 .88934200 - Svstem
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	;	Linear	0.06 Hours
Factors	0.07 h							
							0.88934 [SYS 06140	01 .88934200 - Svstem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	;	Linear	0.01 Hours
Factors	0.01 h							
							0.88934 [SYS 06140	01 .88934200 - Svstem
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenand	e	Linear	12.82 Dollars
Factors	14.2 d		1.015 FY00 Escalation					

Line Item 3a - Preventive maintenance

0.88934 [SYS 061400] .88934200 - System

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$5957 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99 Basis for adjustment - None.

The percentage of maintenance effort (labor Type) required is as follows:

·Approximately 1 preventative maintenance work actions are expected.

Electrician 50.00% (includes Linemen)

37.50% Maint. Mech

Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es	Cost Element	Skill	Department	Curve	Ouantity Units
	750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	77.47 Hours
E	Gastows 97.11 h				

87.11 h

						0.88934 [SYS 0614	001 .88934200 - Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	58.10 Hours
Factors	65.33 h						

0.88934 [SYS 061400] .88934200 - System

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Baseline Devl WBS Filter 1EFB

121 20000	Baseline Cost and Basis of Estimate		Activity Filter	*	Starts In FY *	
750 STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelw	orkers	Linear	8.87 Hours
Factors 9.97 h						
					0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H Indust/Site Srvs Steelw	orkers	Linear	3.88 Hours
Factors 4.36 h						
				0.88934 [SYS 06140	01 .88934200 - Svstem	
751 OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelw	orkers	Linear	2.91 Hours
Factors 3.27 h						
					0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelw	orkers	Linear	0.44 Hours
Factors 0.5 h						
					0.88934 [SYS 06140	01 .88934200 - Svstem
A5C SUPPLIES	0000	NONE	C210S Facilities Mamt & Main	tenance	Linear	574.56 Dollars
Factors 636.5 d		1.015 FY00 Escalation				
					0.88934 [SYS 06140	01 .88934200 - System

Line Item 3b - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 15 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$867.27 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 65% of the FY 99 budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficency return.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50% Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	Cost Element		Skill		Department	Curve	Ouantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	169.20	Hours
Factors	190.25 h							
						0.88934 [SYS 06140	01.88934200 - 3	Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	126.90	Hours
Factors	142.69 h							
_						0.88934 [SYS 06140	01.88934200 - 3	Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	19.36	Hours
Factors	21.77 h							
						0.88934 [SYS 06140	01 .88934200 - 3	Svstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	8.46	Hours
Factors	9.51 h							
						0.88934 [SYS 06140	01 .88934200 - 3	Svstem

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WBS No: 1EFB15 Rock Activity ID: 1EFB0530 Received

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Baseline Devl WBS Filter 1EFB

		Daseille Cost ai	iu basis	o or Estimate	Activity Filter	*	Starts In FY *
751 OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	3	Linear	6.34 Hours
Factors 7.13 h							
						0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	5	Linear	0.97 Hours
Factors 1.09 h							
						0.88934 [SYS 06140	01 .88934200 - Svstem
A5C SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenand	ce	Linear	1.254.90 Dollars
Factors 1.015 FY00 Escalation		1390.19 d					

0.88934 [SYS 061400] .88934200 - System

Line Item SYS - Contingency And Escalation

BOE

Resources Cost Element Skill Department Curve **Ouantity** Units CON CONTINGENCY 0000 NONE ZDEPT No Department Linear 17.723.59 Dollars Factors 17723.6 Dollars ESC ESCALATION 0000 NONE ZDEPT No Department 6.800.19 Dollars Linear

Factors 6800.19 Dollars

Activity ID: 1EFB0535 Description: Site Services Cluster Landlord Funtions, FY04 Cost Risk 2 Schedule Risk

, 1011111, 121												
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
1	Corrective maintenance	1.00	each	HC	20	20	433	115	0	548	122	670
1a	Corrective maintenance	1.00	each	HC	899	899	19.375	5.171	0	24.546	5.464	30.010
3	Preventive maintenance	1.00	each	HC	3	3	74	13	0	87	21	108
3a	Preventive maintenance	1.00	each	HC	152	152	3.324	575	0	3.899	937	4.836
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	5.077	5.077	0	5.077
	To	tal for Activi	tv 1EFB0535	5:		1.074	23.206	5.874	5.077	34.157	6.544	40.701

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 1 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$818 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99

Basis for adjustment - None.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 30.77% (includes Linemen)

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

Stationary Operating Engineer 1.54%

	beationary operating Engineer 1.510						
	This estimate includes a project produc	tivity/efficiency factor for com	mitted but as yet undefined cost reduction	s.			
Resources	Cost Element	. Skill	Department	Curve	Ouantity	Units	
							_

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Ba
WBS Filter 1E
Activity Filter *

Baseline Devl 1EFB

1EFB0535	Baseline Cost a	and Basis of Estimate	WBS Filter 1EF Activity Filter *	.В	Starts In FY *
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworke		Linear	1.30 Hours
Factors 1.46 h				0.00004 [0.000.004.40	01 00004000 0
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworke		0.88934 [SYS 06140 Linear	01.88934200 - System 1.41 Hours
Factors 1.58 h	1 COTO ICANI ENTENS	TIL TOTT IIII III III III III III III III I	213	Lilleal	1.411110013
				0.88934 [SYS 06140	
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworke	ers	Linear	0.86 Hours
Factors 0.97 h				0.88934 [SYS 06140	01 99034300 Systom
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworke		Linear	1.88 Hours
Factors 2.11 h					
		T.,=		0.88934 [SYS 06140	
750 STRAIGHT TIME BASE Factors 2.01 h	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworke	ers	Linear	1.79 Hours
raciors 2.01 II				0.88934 [SYS 06140	01 88934200 - System
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworke	ers	Linear	2.09 Hours
Factors 2.35 h					
TEO OTRAIGUIT TIME DAGE	OO 40 MAINTENANOE MAQUINIOT (* E	1/5/01/ 1 1/07/ 0 0/ 1 1		0.88934 [SYS 06140	
750 STRAIGHT TIME BASE Factors 0.16 h	C040 MAINTENANCE MACHINIST (incl Ex	b KE10H Indust/Site Srvs Steelworke	ers	Linear	0.14 Hours
110 11				0.88934 [SYS 06140	01 .88934200 - Svstem
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Ex	p KE10H Indust/Site Srvs Steelworke	ers	Linear	0.86 Hours
Factors 0.97 h					
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Ex	p KE10H Indust/Site Srvs Steelworke		0.88934 [SYS 06140 Linear	01 .88934200 - System 0.72 Hours
Factors 0.81 h	C040 IMAINTENANCE MACHINIST (INCLEX	D KETOH IIIdust/Site SIVS SteelWorks	ers	Linear	0.72 HOUIS
3.31				0.88934 [SYS 06140	0] .88934200 - System
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworke	ers	Linear	0.86 Hours
Factors 0.97 h					
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworke	ore	0.88934 [SYS 06140] Linear	0] .88934200 - System 1.48 Hours
Factors 1.66 h	1 COTO IFAINTENS	TRETOTT IIIIdus/Site SIVS SteetWorke	213	Lilleal	1.401110015
			T-	0.88934 [SYS 06140	
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworke	ers	Linear	2.98 Hours
Factors 3.35 h				0.00004 [0.00.004.40	01 0000 4000 0 0 1-4
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworke	ers	0.88934 [SYS 06140] Linear	0.58 Hours
Factors 0.65 h		THE TOTAL INITIAL OF THE CONTROL OF	1		U.OOH IOUIO
				0.88934 [SYS 06140	
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworke	ers	Linear	0.47 Hours
Factors 0.53 h				0.88934 [SYS 06140	01 99034300 Systom
750 STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL WORKE	KE10H Indust/Site Srvs Steelwork	ers	Linear	1.27 Hours
Factors 1.43 h					
			<u> </u>	0.88934 [SYS 06140	
750 STRAIGHT TIME BASE Factors 0.49 h	R070 WASTE TREATMENT OPERATOR A	A KE10H Indust/Site Srvs Steelworke	ers	Linear	0.44 Hours
Factors 0.49 h				0.88934 [SYS 06140	01 88934200 - System
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworke	ers	Linear	0.07 Hours
Factors 0.08 h					
				0.88934 [SYS 06140	0] .88934200 - System

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate Proiect
WBS Filter
Activity Filter

Baseline Devl 1EFB

Starts In FY

		Activity F	ilter *	Starts In FY
751 OVERTIME BASE & PRE. Factors 0.07 h	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	0.06 Hours
Factors 0.07 h			0.88934 [SYS 0614	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	0.04 Hours
Factors 0.05 h			0.00034 [CVC.0614	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	0.86934 1313 0614 Linear	0.09 Hours
Factors 0.1 h				
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	0.88934 [SYS 0614 Linear	001 .88934200 - Svstem 0.11 Hours
Factors 0.12 h	1 COZO IEEECTNICIANS	NETOTI IIIIUUSVSILE SIVS SIEEIWOIKEIS	Lilleal	0.111110dis
				001 .88934200 - Svstem
751 OVERTIME BASE & PRE. Factors 0.11 h	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	0.10 Hours
raciors 0.11 II			0.88934 [SYS 0614	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl.)	Exp KE10H Indust/Site Srvs Steelworkers	Linear	0.04 Hours
Factors 0.05 h			0.00004 [0.000.0044	001 00004000 Custsus
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl.)	Exp KE10H Indust/Site Srvs Steelworkers	0.88934 ISYS 0614 Linear	001 .88934200 - Svstem 0.04 Hours
Factors 0.04 h				
754 0/507145 0405 4 005	OO 40 MAINTENANOE MAGUINIOT (; . I.	Exp KE10H Indust/Site Srvs Steelworkers		001 .88934200 - Svstem
751 OVERTIME BASE & PRE. Factors 0.01 h	C040 MAINTENANCE MACHINIST (INCLE	EXD KE10H Indust/Site Srvs Steelworkers	Linear	0.01 Hours
1 401075			0.88934 [SYS 0614	00] .88934200 - System
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	0.04 Hours
Factors 0.05 h			0.88934 ISVS 0614	00] .88934200 - System
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	0.07 Hours
Factors 0.08 h				
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 SYS 0614 Linear	00] .88934200 - System 0.03 Hours
Factors 0.03 h	TOOO II LOIMBEINO AIRB I II EI II I EINO	TILE TOTT IIIIMASVOICE OF VS OCCUMUNICIS	Lilleai	0.001110413
				001 .88934200 - Svstem
751 OVERTIME BASE & PRE. Factors 0.03 h	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	0.03 Hours
rations 0.00 II			0.88934 [SYS 0614	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	0.15 Hours
Factors 0.17 h			0.8088 1.8088 0	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C090 STRUCTURAL AND METAL WOR	KE KE10H Indust/Site Srvs Steelworkers	0.86934 1313 0014 Linear	0.06 Hours
Factors 0.07 h				
751 OVERTIME BASE & PRE.	DOZO WASTE TREATMENT OPERATOR	R A KE10H Indust/Site Srvs Steelworkers		001 .88934200 - Svstem 0.02 Hours
751 OVERTIME BASE & PRE. Factors 0.02 h	I KU/U IWASTE IKEATWENT OPERATOR	KA NETUR IINQUST/SITE STVS STEETWORKERS	Linear	U.UZIHOUI'S
			0.88934 [SYS 0614	001 .88934200 - Svstem
A5C SUPPLIES	0000 NONE	C210S Facilities Momt & Maintenance	Linear	115.37 Dollars
<i>Factors</i> 127.81 d	1.015 FY00 Escalation			

Line Item 1a - Corrective maintenance

0.88934 [SYS 061400] .88934200 - System

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Baseline Devl WBS Filter 1EFB

Activity Filter * Starts In FY

was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 44 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$832.64 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99 Basis for adjustment - None.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 30.77% (includes Linemen)

Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

s	Cost Element	Skill	Department	Curve	Ouantity Units
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	38.73 Hours
Facto	<i>rs</i> 43.55 h				
				0.88934 [SYS 06140	001 .88934200 - Svstem
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	58.10 Hours
Facto	<i>rs</i> 65.33 h				
				0.88934 [SYS 06140	001 .88934200 - Svstem
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	62.94 Hours
Facto	<i>rs</i> 70.77 h				
				0.88934 [SYS 06140	01 .88934200 - Svstem
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	80.15 Hours
Facto	<i>rs</i> 90.12 h				
				0.88934 [SYS 06140	01 .88934200 - Svstem
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	93.59 Hours
Facto	<i>rs</i> 105.24 h				
				0.88934 [SYS 06140	01 .88934200 - Svstem
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	83.92 Hours
Facto	<i>rs</i> 94.36 h				
				0.88934 [SYS 06140	01 .88934200 - Svstem
750	STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear	32.27 Hours
Facto	<i>rs</i> 36.29 h				
			T T	0.88934 ISYS 06140	001 .88934200 - Svstem
750		C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear	38.73 Hours
Facto	<i>rs</i> 43.55 h				
			T T	0.88934 ISYS 06140	001 .88934200 - Svstem
750		C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear	6.46lHours
Facto	<i>rs</i> 7.26 h				
					001 .88934200 - Svstem
750		C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	66.17 Hours
Facto	<i>rs</i> 74.4 h				
				0.88934 [SYS 06140	01 .88934200 - Svstem

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WBS No: 1EFB15 1EFB0535 Activity ID:

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect

Baseline Devl WBS Filter 1E
Activity Filter * 1EFB

1EFB0535	Baseline Cost an	d Basis of Estimate	WBS Filter 1EFB Activity Filter *	Starts In FY *
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelwo		38.73 Hours
Factors 43.55 h			0.00004 F0V0.00	24.4001.0000.4000
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwo		14001 .88934200 - Svstem 20.97 Hours
Factors 23.58 h				
ZEO CTRAICUT TIME DACE	COOR DILIMPEDE AND DIDEFITTEDE	IVEAUL Indust/Cita Crus Stanleye		14001 .88934200 - Svstem 133.44 Hours
750 STRAIGHT TIME BASE Factors 150.04 h	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwo	irkers Linear	133.44IHOUIS
			0.88934 ISYS 06	14001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwo	rkers Linear	25.83 Hours
Factors 29.04 h			0.88934 [SVS 06	14001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL WORKE	KE10H Indust/Site Srvs Steelwo		57.02 Hours
Factors 64.12 h				
750 STRAIGHT TIME BASE	R070 WASTE TREATMENT OPERATOR A	KE10H Indust/Site Srvs Steelwo		14001 .88934200 - Svstem 19.37 Hours
750 STRAIGHT TIME BASE Factors 21.78 h	1 RU/U IWASTE TREATMENT OPERATOR A	KETOH IIIIdusi/Sile Sivs Steelwo	rkers Linear	19.3/10uis
2			0.88934 ISYS 06	14001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelwo	rkers Linear	2.91 Hours
Factors 3.27 h			0.00031 150000	14001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelwo		3.15 Hours
Factors 3.54 h				
OVEDTUE DAGE & DDE	0010 0100000000	VE1011 1 1/01 0 0 1		1400] .88934200 - System
751 OVERTIME BASE & PRE. Factors 2.18 h	C010 CARPENTERS	KE10H Indust/Site Srvs Steelwo	rkers Linear	1.94 Hours
1 44075 2.10 11			0.88934 [SYS 06	1400] .88934200 - System
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwo		4.01 Hours
Factors 4.51 h			0.00004 16006	214001 00024200 Cuntom
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwo	rkers Linear	1400] .88934200 - System 4.68 Hours
Factors 5.26 h				
	1 1			14001 .88934200 - System
751 OVERTIME BASE & PRE. Factors 4.72 h	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwo	rkers Linear	4.20 Hours
racions 4.72 II			0.88934 [SYS 06	14001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelwo	rkers Linear	1.94 Hours
Factors 2.18 h			0.00004 10000.00	44001 00004000 0 4
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srys Steelwo	0.88934 ISYS 06	14001 .88934200 - Svstem 1.61 Hours
Factors 1.81 h	1 OOTO HAN HATELY HAVE IN TOT HIND THE LAD	TE TOTT IIII GUSVOITE OTVS STEETWO		1.011110013
			0.88934 ISYS 06	14001 .88934200 - Svstem
751 OVERTIME BASE & PRE. Factors 0.36 h	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelwo	rkers Linear	0.32 Hours
Factors 0.36 h			0.88934 ISYS 06	14001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelwo	rkers Linear	3.31 Hours
Factors 3.72 h				
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelwo	0.88934 [SYS 06 rkers Linear	14001 .88934200 - Svstem 1.94 Hours
Factors 2.18 h	I GUIU IFAIINI ENS	LVETOL IIIIIIII SIAS SIGEIMO	incis Lilledf	1.94Inours
2			0.00034 16V6.00	1400] .88934200 - System

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl 1EFB

	Baseline Cost an	d Basis of Estimate	Filter *	Starts In FY *
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	1.29 Hours
Factors 1.45 h				
			0.88934 [SYS 061400	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	1.05 Hours
Factors 1.18 h				
			0.88934 [SYS 061400	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	6.67 Hours
Factors 7.5 h				
			0.88934 [SYS 061400	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C090 STRUCTURAL AND METAL WORKE	KE10H Indust/Site Srvs Steelworkers	Linear	2.85 Hours
Factors 3.21 h				
			0.88934 [SYS 061400	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	R070 WASTE TREATMENT OPERATOR A	KE10H Indust/Site Srvs Steelworkers	Linear	0.97 Hours
Factors 1.09 h				
			0.88934 [SYS 061400	01 .88934200 - Svstem
A5C SUPPLIES	0000 NONE	C210S Facilities Momt & Maintenance	Linear	5.170.98 Dollars
E	==00.40			

Factors 1.015 -- FY00 Escalation -- 5728.46 d 0.88934 [SYS 061400] .88934200 - System

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 1 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$133 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99 Basis for adjustment - None.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50%

Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Ouantity Units			
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	1.73 Hours			
Factors 1.94 h							
			0.88934 [SYS 06140	01 .88934200 - Svstem			
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (i	incl Exp KE10H Indust/Site Srvs Steelworkers	Linear	1.30 Hours			
Factors 1.46 h							
			0.88934 [SYS 06140	01 .88934200 - Svstem			
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTER	RS KE10H Indust/Site Srvs Steelworkers	Linear	0.20 Hours			
Factors 0.22 h							
			0.88934 [SYS 06140	01 .88934200 - Svstem			

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Baseline Devl WBS Filter 1EFB

		Daseille Cost an	iu Dasis	Activity Filter	*	Starts In FY *
751 OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.09 Hours
Factors 0.1 h						
	_				0.88934 [SYS 06140	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.06 Hours
Factors 0.07 h						
					0.88934 ISYS 06140	001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.01 Hours
Factors 0.01 h						
					0.88934 ISYS 06140	001 .88934200 - Svstem
A5C SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	12.82 Dollars
Factors 14.2 d		1.015 FY00 Escalation				
					0.88934 [SYS 06140	001 .88934200 - System

Line Item 3a - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

Approximately 1 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$5957 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99 Basis for adjustment - None.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50%

Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		<u>Department</u>	Curve	Quantity Units
STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	77.47 Hours
87.11 h						
					0.88934 [SYS 0614	001 .88934200 - Svstem
STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	58.10 Hours
65.33 h						
					0.88934 [SYS 0614	001 .88934200 - Svstem
STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	8.87 Hours
9.97 h						
					0.88934 [SYS 0614	001 .88934200 - Svstem
OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.88 Hours
4.36 h						
					0.88934 [SYS 0614	001 .88934200 - Svstem
OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	2.91 Hours
3.27 h						
					0.88934 [SYS 0614	001 .88934200 - Svstem
	STRAIGHT TIME BASE 87.11 h STRAIGHT TIME BASE 65.33 h STRAIGHT TIME BASE 9.97 h OVERTIME BASE & PRE. 4.36 h OVERTIME BASE & PRE.	STRAIGHT TIME BASE C020 87.11 h	STRAIGHT TIME BASE C020 ELECTRICIANS 87.11 h STRAIGHT TIME BASE C040 MAINTENANCE MACHINIST (incl Exd 65.33 h STRAIGHT TIME BASE C080 PLUMBERS AND PIPEFITTERS 9.97 h OVERTIME BASE & PRE. C020 ELECTRICIANS 4.36 h OVERTIME BASE & PRE. C040 MAINTENANCE MACHINIST (incl Exd	STRAIGHT TIME BASE C020 ELECTRICIANS KE10H 87.11 h STRAIGHT TIME BASE C040 MAINTENANCE MACHINIST (incl Exp KE10H 65.33 h STRAIGHT TIME BASE C080 PLUMBERS AND PIPEFITTERS KE10H 9.97 h OVERTIME BASE & PRE. C020 ELECTRICIANS KE10H 4.36 h OVERTIME BASE & PRE. C040 MAINTENANCE MACHINIST (incl Exp KE10H	STRAIGHT TIME BASE C020 ELECTRICIANS KE10H Indust/Site Srvs Steelworkers 87.11 h STRAIGHT TIME BASE C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers 65.33 h STRAIGHT TIME BASE C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers 9.97 h OVERTIME BASE & PRE. C020 ELECTRICIANS KE10H Indust/Site Srvs Steelworkers 4.36 h OVERTIME BASE & PRE. C040 MAINTENANCE MACHINIST (incl Exp KE10H Indust/Site Srvs Steelworkers	STRAIGHT TIME BASE C020 ELECTRICIANS KE10H Indust/Site Srvs Steelworkers Linear

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl 1EFB

			Activity Filter	*	Starts In FY *				
	751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworke	rs	Linear	0.44 Hours	
F	actors	0.5 h							

0.88934 [SYS 061400] .88934200 - System C210S Facilities Mamt & Maintenance 0000 NONE 574.56 Dollars SUPPLIES

636.5 d 1.015 -- FY00 Escalation --Factors

0.88934 [SYS 061400] .88934200 - System

Line Item SYS - Contingency And Escalation

BOE

Resources

es		Cost Element	Skill			Department	Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear 1.65		Dollars
1	Factors	1656.45 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	3.420.48	Dollars

3420.48 Dollars

Activity ID: 1EXXXB0535 Description: Site Services Cluster Landlord Funtions, End. Cost Risk 2 Schedule Risk

,,	Diagonal City Control City City City City City City City City											
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
1	Corrective maintenance	0.87	each	HC	20	18	378	101	0	479	132	610
1a	Corrective maintenance	0.87	each	HC	899	785	16.922	4.516	0	21.438	5.889	27.327
3	Preventive maintenance	0.87	each	HC	3	3	65	11	0	76	23	98
3a	Preventive maintenance	0.87	each	HC	152	132	2.903	502	0	3.405	1.010	4.415
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	17.315	17.315	0	17.315
	То	tal for Activ	ity 1EXXXB0	535:		938	20.267	5.130	17.315	42.712	7.053	49.765

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 1 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$818 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99

Basis for adjustment - None.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

Electrician 30.77% (includes Linemen)

Maint. Mech 13 85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%

Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es		Cost Element Skill			Department	Curve	Ouantity	Units
	750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.30	Hours

Factors 1.46

0.88934 [SYS 061400] .88934200 - System

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Ba
WBS Filter 1E
Activity Filter *

Baseline Devl 1EFB

1EXXXB0535	Baseline Cost	and Basis of Estimate	WBS Filter 1EFB Activity Filter *	Starts In FY *
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelwork		1.41 Hours
Factors 1.58 h				
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelwork		4001 .88934200 - Svstem 0.86 Hours
Factors 0.97 h	1 COTO ICANFLIVIENS	RETOTT IIIIdusVSite SIVS SteelWork	eis Lilieai	0.001110015
				4001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwork	ers Linear	1.88 Hours
Factors 2.11 h			0.00004 10000 004	4001 00004000 0
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwork		4001 .88934200 - Svstem 1.79 Hours
Factors 2.01 h	T VOES TELESTIMONIAS	The form initiative of the discontinuity		1.701110410
				4001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelwork	ers Linear	2.09 Hours
Factors 2.35 h			0.9024 1575.064	4001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl E	xp KE10H Indust/Site Srvs Steelwork		0.14 Hours
Factors 0.16 h				
	T			4001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl E	xp KE10H Indust/Site Srvs Steelwork	ers Linear	0.86 Hours
Factors 0.97 h			0.8084 [575.061	4001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl E	xp KE10H Indust/Site Srvs Steelwork	ers Linear	0.72 Hours
Factors 0.81 h				
				400] .88934200 - System
750 STRAIGHT TIME BASE Factors 0.97 h	C070 PAINTERS	KE10H Indust/Site Srvs Steelwork	ers Linear	0.86 Hours
raciors 0.97 II			0.88934 ISYS 061	400] .88934200 - System
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelwork		1.48 Hours
Factors 1.66 h				
TEO OTDAIGUT TIME DAGE	OCCO DI LIMPEDO AND DIDEFITTEDO	1/5/01/ 1 1/0: 0 0: 1 1		400] .88934200 - System
750 STRAIGHT TIME BASE Factors 3.35 h	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwork	ers Linear	2.98 Hours
3.33			0.88934 [SYS 061	4001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwork		0.58 Hours
Factors 0.65 h				
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwork		4001 .88934200 - Svstem 0.47 Hours
Factors 0.53 h	1 C080 IFLUIVIBERS AND FIFEFITIERS	RETURN IIII III III III III III III III III	ers Linear	0.471H0uis
. determ			0.88934 [SYS 061	4001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL WORK	E KE10H Indust/Site Srvs Steelwork	ers Linear	1.27 Hours
Factors 1.43 h				
750 STRAIGHT TIME BASE	R070 WASTE TREATMENT OPERATOR	A KE10H Indust/Site Style Steelwork		4001 .88934200 - Svstem 0.44 Hours
Factors 0.49 h	T NOTO IWASTE TREATMENT OF ENATOR	A TILLIOIT IIIIGGSVOILE SIVS SLEEIWOIN	CIS LINEAL	0.441110013
				4001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelwork	ers Linear	0.07 Hours
Factors 0.08 h			0.00004 5000.004	4001 00004000 0
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelwork	0.88934 ISYS 061	4001 .88934200 - Svstem 0.06 Hours
Factors 0.07 h	1 JOIN IOMNI ENTENO	TALIST IIII MUSICINO SIVS SIGEIWOIN	Lineal Lineal	0.00ii louis
			0.88934 [SYS 061	400] .88934200 - System

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filter

Baseline Devl 1EFB

TEXAAB0000	Baseline Cost a	and Basis of Estimate	Activity Filter *	Starts In FY *
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers		0.04 Hours
Factors 0.05 h				
754 0//5071145 0405 0 005	OCCO ELECTRICIANO	1451011 1 1 1407 0 0 1 1 1		001 .88934200 - Svstem 0.09 Hours
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	0.09lHours
actors 0.1 II			0.88934 [SYS 0614	001 .88934200 - Svsten
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers		0.11 Hours
Cactors 0.12 h				
754 0\/507!\\\F\\00000\\00000\\00000\\00000\\00000\\0000	OCCO ELECTRICIANO	1451011 1 1 1407 0 0 1 1 1		001 .88934200 - Svster
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	0.10 Hours
actors 0.11 II			0.88934 [SYS 0614	001 .88934200 - Svster
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Ext	KE10H Indust/Site Srvs Steelworkers		0.04 Hours
Cactors 0.05 h				
				001 .88934200 - Svster
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Ext	b KE10H Indust/Site Srvs Steelworkers	Linear	0.04 Hours
factors 0.04 h			0.88934 ISVS.0614	001 .88934200 - Svster
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Ext	KE10H Indust/Site Srvs Steelworkers		0.01 Hours
actors 0.01 h			-	
				001 .88934200 - Svster
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	<u>Linear</u>	0.04 Hours
Cactors 0.05 h			0.80034 1575.0544	00] .88934200 - Syster
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers		0.07 Hours
Cactors 0.08 h	1 COTO IL TIMATENO	THE TOTAL INICIOUS CITY STOCKWOINGTO	, Enlock	0.071110010
				00] .88934200 - Syster
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	0.03 Hours
Factors 0.03 h			0.00004 100/0.0044	001 0000 4000 0 4
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers		00] .88934200 - Syster 0.03 Hours
factors 0.03 h	1 COOO II LOWDENS AND I II EITITENS	TETOTI IIII GUSIVOILE OIVS SIEELWOIKEIS	Lilleai	0.051110013
			0.88934 [SYS 0614	001 .88934200 - Svster
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	0.15 Hours
actors 0.17 h				
751 OVERTIME BASE & PRE.	C090 STRUCTURAL AND METAL WORKE			001 .88934200 - Svste 0.06 Hour
751 OVERTIME BASE & PRE. actors 0.07 h	1 C090 ISTRUCTURAL AND METAL WORKE	KETUH lindust/Site Srvs Steelworkers	s Linear	U.UbiHour
0.07			0.88934 [SYS 0614	001 .88934200 - Svste
751 OVERTIME BASE & PRE.	R070 WASTE TREATMENT OPERATOR A	KE10H Indust/Site Srvs Steelworkers		0.02 Hour
Cactors 0.02 h				
				001 .88934200 - Svste
A5C SUPPLIES	0000 NONE	C210S Facilities Mamt & Maintenand	ce Linear	115.37 Dolla
<i>Tactors</i> 127.81 d	1.015 FY00 Escalation			

Line Item 1a - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Proiect WBS Filter Activity Filter Baseline Devl 1EFB

Starts In FY

·Approximately 44 corrective/routine maintenance work actions are expected. Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98 Item Desc - Fiscal Year Corrective Maintenance Breakdown of Data: Item - Corrective maintenance Units - Work Packages Unit Cost - \$832.64 average for this cluster Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99 Basis for adjustment - None. The percentage of maintenance effort (labor Type) is as follows: Carpenter 15.38% Electrician 30.77% (includes Linemen) Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62% Stationary Operating Engineer 1.54%

Resources

s	Cost Element	Skill	Department	Curve	Quantity Units
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	38.73 Hours
Factor	s 43.55 h				
				0.88934 [SYS 061	4001 .88934200 - Svstem
750	•	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	58.10 Hours
Factor	s 65.33 h				
	1	T T			4001 .88934200 - Svstem
750	•	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	62.94 Hours
Factor	s 70.77 h				1001 0000 1000 0
750	OTD A IOUT TIME DAGE	OCCO ELECTRICIANO	1/54011 1 1 1/0% 0 0 1 1		4001 .88934200 - Svstem
750	•	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	80.15 Hours
Factor	s 90.12 n			0.00034 ISVS 061	4001 .88934200 - System
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	0.88934 1515 0614 Linear	93.59 Hours
Factor		1 CO20 ILLECTRICIANS	NETOTI IIIdusVSIte SIVS SteelWorkers	Lilledi	93.391110015
racioi	3 105.24 11			0.88934 ISVS 061	4001 .88934200 - System
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	83.92 Hours
Factor		1 0000 1000 1111011110	THE FOIL MINNEY SITE STOCKHOOL	=1175	OUIDEN IOUID
				0.88934 [SYS 061-	4001 .88934200 - System
750	STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (i	ncl Exp KE10H Indust/Site Srvs Steelworkers	Linear	32.27 Hours
Factor	s 36.29 h				
				0.88934 [SYS 061-	4001 .88934200 - Svstem
750	STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (i	ncl Exp KE10H Indust/Site Srvs Steelworkers	Linear	38.73 Hours
Factor	s 43.55 h				
					4001 .88934200 - Svstem
750		L C040 IMAINTENANCE MACHINIST (i	ncl Exp KE10H Indust/Site Srvs Steelworkers	Linear	6.46lHours
Factor	s 7.26 h				
		T I			4001 .88934200 - Svstem
750		C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	66.17 Hours
Factor	s 74.4 h			0.00004 10000	4001 0000 4000 Conta
750	STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	0.88934 ISYS 0614 Linear	4001 .88934200 - Svstem 38.73 Hours
Factor		1 COLO ILAIMIEKS	VE IAU ILLIANSIADILE DIAS PIEGIMOLKELS	Lineai	30.73JHOUIS
r actor	s 45.55 II			0.88034 [SVS 061	4001 .88934200 - System
			+	0.00934 1313 0014	+001.00334200 - 3VSIEIII

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Ba
WBS Filter 1E
Activity Filter *

t Baseline Devl Filter 1EFB

1EXXXB0535	Baseline Cost a	nd Basis of Estimate	WBS Filter 1EFB Activity Filter *	Starts In FY *
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworke		20.97 Hours
Factors 23.58 h				
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworke		14001 .88934200 - System 133.44 Hours
Factors 150.04 h	1 CUOU IPLUIVIBERS AND PIPEFITIERS	TRETUR IIIIdust/Site Sivs Steetwork	ers Linear	133.44IHUUIS
				14001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworke	ers Linear	25.83 Hours
Factors 29.04 h			0.00034 15000.00	14001 .88934200 - Svstem
750 STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL WORKE	KE10H Indust/Site Srvs Steelworke		57.02 Hours
Factors 64.12 h				
		T		14001 .88934200 - Svstem
750 STRAIGHT TIME BASE Factors 21.78 h	R070 WASTE TREATMENT OPERATOR A	KE10H Indust/Site Srvs Steelworke	ers Linear	19.37 Hours
ractors 21.78 n			0.88934 ISYS.06	14001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworke		2.91 Hours
Factors 3.27 h				
OVERTIME DAGE & DRE	0040 0400547500			14001 .88934200 - Svstem
751 OVERTIME BASE & PRE. Factors 3.54 h	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworke	ers Linear	3.15lHours
Tuctors 3.54 II			0.88934 [SYS 06	14001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworke		1.94 Hours
Factors 2.18 h				
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworke		1400] .88934200 - System 4.01 Hours
Factors 4.51 h	CU20 ELECTRICIANS	RETUR IIIIdust/Site Sivs Steelworke	ers Linear	4.01 nouis
140015			0.88934 [SYS 06 ⁻	1400] .88934200 - System
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworke	ers Linear	4.68 Hours
Factors 5.26 h			2 2222 / 12/12 22	
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworke		1400] .88934200 - System 4.20 Hours
Factors 4.72 h	T CO20 ILLECTRICIANS	TRETOTI IIII III III III III III III III II	ers Linear	4.2011 10015
				14001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworke	ers Linear	1.94 Hours
Factors 2.18 h			0.00024 16V6.06	14001 00024200 Cyctom
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srys Steelwork	ers Linear	14001 .88934200 - Svstem 1.61 Hours
Factors 1.81 h			UI EII WAI	1.011110010
				14001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworke	ers Linear	0.32 Hours
Factors 0.36 h			0.88034 1675 06	14001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworke		3.31 Hours
Factors 3.72 h				
				14001 .88934200 - Svstem
751 OVERTIME BASE & PRE. Factors 2.18 h	C070 PAINTERS	KE10H Indust/Site Srvs Steelworke	ers Linear	1.94 Hours
Factors 2.18 h			0.88934 ISVS.06	14001 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworke		1.29 Hours
Factors 1.45 h				
			0.88934 [SYS 06 ⁻	1400] .88934200 - System

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect B WBS Filter 1

Baseline Devl 1EFB

		baseline Cost ai	nu basis	or Estimate	ctivity Filter '	k	Starts In FY *
751 OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers		Linear	1.05 Hours
Factors 1.18 h							
			_			0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers		Linear	6.67 Hours
Factors 7.5 h							
			_			0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers		Linear	2.85 Hours
Factors 3.21 h							
	,					0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers		Linear	0.97 Hours
Factors 1.09 h							
						0.88934 [SYS 06140	01 .88934200 - Svstem
A5C SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance		Linear	5.170.98 Dollars
Factors 1.015 FY00 Escalation		5728.46 d					
						0.88934 [SYS 06140	01 .88934200 - System

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 1 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$133 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99 Basis for adjustment - None.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50% Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		. Skill		Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.73	Hours
Factors 1.94 h							
		1	I	T.	0.88934 [SYS 06140	001 .88934200 -	Svstem
750 STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.30	Hours
Factors 1.46 h							
			1		0.88934 [SYS 06140	01.88934200 -	Svstem
750 STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.20	Hours
Factors 0.22 h							
			1		0.88934 [SYS 06140	01.88934200 -	Svstem
751 OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.09	Hours
Factors 0.1 h							
					0.88934 [SYS 06140	001 .88934200 -	Svstem

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Baseline Devl WBS Filter 1EFB

		Daseille Cost al	u Dasis	OI ESIIIIale	Activity Filter	*	Starts In FY *
751 OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	5	Linear	0.06 Hours
Factors 0.07 h							
						0.88934 [SYS 06140	01 .88934200 - Svstem
751 OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	3	Linear	0.01 Hours
Factors 0.01 h							
						0.88934 [SYS 06140	01 .88934200 - Svstem
A5C SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenand	ce	Linear	12.82 Dollars
Factors 14.2 d		1.015 FY00 Escalation					

Line Item 3a - Preventive maintenance

0.88934 [SYS 061400] .88934200 - System

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

Approximately 1 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$5957 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99

Basis for adjustment - None.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50% Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

s		Cost Element		Skill		Department	Curve	Ouantity	Units
Ĺ	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	77.47	Hours
1	Factors	87.11 h							
-							0.88934 [SYS 061400	01 .88934200 - \$	Svstem
	750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	58.10	Hours
	Factors	65.33 h							
-							0.88934 [SYS 061400	01 .88934200 - \$	Svstem
	750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	8.87	Hours
	Factors	9.97 h							
_							0.88934 [SYS 061400	01 .88934200 - \$	Svstem
Ĺ	751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.88	Hours
	Factors	4.36 h							
-							0.88934 [SYS 061400	01 .88934200 - \$	Svstem
	751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	2.91	Hours
	Factors	3.27 h							
-							0.88934 [SYS 061400	01 .88934200 - \$	Svstem
	751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.44	Hours
	Factors	0.5 h							
_							0.88934 [SYS 061400	01 .88934200 - 9	System

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WBS No: 1EFB15 Rocky Flats Closure Project Project Baseline Devl
Activity ID: 1EXXXB0535 Baseline Cost and Basis of Estimate WBS Filter 1EFB

Activity Filter * Starts In FY *

A5C SUPPLIES 0000 NONE C210S Facilities Momt & Maintenance Linear 574.56 Dollars

Factors 1.015 -- FY00 Escalation -- 636.5 d

0.88934 [SYS 061400] .88934200 - System

Line Item SYS - Contingency And Escalation

BOE

Resources	Cost Element	Skill	Department	Curve	Ouantity Units
	CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	12.288.05 Dollars
	Factors 12288.1 Dollars				
	ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	5.027.05 Dollars

Factors 5027.05 Dollars

Report Totals:

bor Hours Total		Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
253.741	5.651.200	1.723.665	1.532.494	8.907.358	2.230.307	11.137.665

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